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AUTHOR Peterson, M. F.  
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## ABSTRACT

A study made to identify the critical educational needs of the State of North Dakota is presented in the six chapters of this report and its appendixes. Chapter I, Introduction, discusses historical considerations and provides an overview of the report. Chapter II contains a comprehensive but concise description of the technical procedures employed in the study, which utilized a two-prong attack. The first prong was to identify what the various segments of North Dakota's population felt were educational areas requiring further attention; and the second prong was to document evidence that would prove whether or not these problem areas could justifiably be identified as critical educational needs for Title III, ESEA. Chapters III and IV present the results of the first prong of the attack; Chapter III presents the results of a pilot study conducted in late spring of 1969 in the northeastern region of the state. The purpose of the pilot study was to make possible the testing of the procedures and the instrument developed for the needs assessment study. Chapter IV presents the results of the statewide needs assessment conducted in late Fall 1969. Chapter V presents the results of the second prong of the attack, consisting of a series of brief reports by experts in approximately 30 highest ranking educational needs. These reports contain data comparing the status of each need in North Dakota with its status in other states or nationally. The reports conclude with recommendations as to whether each need is critical for Title III, ESEA. Chapter VI summarizes the information of the proceeding chapters. Thirty-three tables provide the study data. The Pilot and Statewide Questionnaires are given in appendixes. (DB)



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(B)

NORTH DAKOTA  
TITLE III, ESEA  
ASSESSMENT OF EDUCATIONAL NEEDS

Prepared for

DIRECTOR

Division of Plans and Supplementary Centers  
Office of Education  
Washington, D.C.

by

M. F. Peterson, Superintendent  
State of North Dakota  
Department of Public Instruction  
Bismarck, North Dakota

December 31, 1969



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Vernon Eberly      State Coordinator

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in cooperation with

Evaluation Subcontractor  
Bureau of Educational Research and Services  
University of North Dakota  
Grand Forks, North Dakota

Edward Krahmer, Title III State Evaluator  
Clyde Morris, Editor  
Gerald Norberg, Graduate Assistant Pilot Assessment  
Robert Bergeth, Graduate Assistant Statewide Assessment  
Louis Wangberg, Graduate Assistant Statewide Assessment

December 31, 1969

## FOREWORD

Amendments to Title III of the Elementary and Secondary Act, Public Law 89-10, require that the educational needs of the State be identified and documented. The study that follows was originated in response to that requirement. A number of the most pressing of these needs will be selected by the State Advisory Council and the State Department of Public Instruction for attack through innovative Title III programs developed by local educational agencies.

The contents of this publication are the results of a contract negotiated by the Department of Public Instruction with the Bureau of Educational Research of the University of North Dakota at Grand Forks. The study and this publication were financed with funds from Title III of the Elementary and Secondary Education Act.

We are grateful to the University staff, educators at both the state and local level, parents, students, and laymen who have helped to make the statewide assessment of critical educational needs a reality.

M. F. PETERSON  
Superintendent of Public Instruction

## TABLE OF CONTENTS

	Page
LIST OF TABLES AND FIGURES . . . . .	v
Chapter	
I. INTRODUCTION . . . . .	1.1
Historical Considerations . . . . .	1.1
Overview of the Report . . . . .	1.3
II. DESCRIPTION OF PROCEDURES . . . . .	2.1
Identification of Potential Critical Educational Needs . . . . .	2.1
Pilot Study . . . . .	2.1
Development of the Instrument	
Description of the Populations	
Instrument Administration Procedures	
Statistical Treatment of the Data	
Statewide Study . . . . .	2.8
Development of the Instrument	
Description of the Populations	
Instrument Administration Procedures	
Statistical Treatment of the Data	
Justification of the Critical Nature of these Needs . . . . .	2.15
III. RESULTS OF THE PILOT NEEDS ASSESSMENT . . . . .	3.1
IV. RESULTS OF THE STATEWIDE NEED ASSESSMENT . . . . .	4.1
Overall State Rankings of Educational Needs . . . . .	4.1
Regional Rankings of Educational Needs . . . . .	4.9
Rankings of Educational Needs by Several Variables . . . . .	4.25
Rankings of Educational Needs by Other Populations . . . . .	4.46
Instrument Reliability . . . . .	4.51
V. JUSTIFICATION OF THE CRITICAL NATURE OF HIGHLY RANKED EDUCATIONAL NEEDS . . . . .	5.1
Educational Programs for Students of Varying Achievement Levels . . . . .	5.3
Programs for Students with Learning Disabilities . . . . .	5.15
Counseling and Guidance Services . . . . .	5.21
Curriculum Areas for K-12 Education . . . . .	5.31
Flexibility in Education . . . . .	5.41

	Page
Psychological Services. . . . .	5.45
Reading and Speech Services . . . . .	5.49
Equipment, Facilities, and Personnel for Education. . . . .	5.55
Vocational Education. . . . .	5.63

## VI. SUMMARY

Procedures. . . . .	6.1
Results of the Pilot and Statewide Assessment . . . . .	6.4
Justification of Assessment Results . . . . .	6.16
Recommendations . . . . .	6.18

## APPENDICES

A	Assessment of Educational Needs in the State. . . . .	A.1
B	Pilot Questionnaire . . . . .	B.1
C	Statewide Questionnaire . . . . .	C.1
D	Regional Map of North Dakota from 1970 Title III State Plan. . . . .	D.1
E	Instructions for Report on Critical Nature of Educational Needs . . . . .	E.1

## LIST OF FIGURES AND TABLES

Figure	Page
1. Summary of Statewide Assessment Sampling Procedures . . . . .	2.11
 Table	
1. Rankings of Seniors, Parents, and Educators of 11 Educational Needs . . . . .	3.2
2. Rankings of Seniors, Parents, and Educators of 79 Educational Needs . . . . .	3.3
3. Rankings of Parents and Educators of 110 Educational Needs . . . . .	3.6
4. Rankings of Rural and Urban Students and Parents of 11 Educational Categories . . . . .	3.10
5. Rankings of Rural and Urban Students and Parents of 79 Educational Needs . . . . .	3.11
6. Rankings of Students, Parents, and Educators from Fully Accredited and Non-Accredited Districts of 11 Educational Categories . . . . .	3.13
7. Rankings of Students, Parents, and Educators from Fully Accredited and Non-Accredited Districts of 79 Educational Needs . . . . .	3.14
8. Rankings of Students, Parents, and Educators of 10 Educational Categories . . . . .	4.3
9. Rankings of Students, Parents, and Educators of 72 Educational Needs . . . . .	4.4
10. Rankings of Parents and Educators of 90 Educational Needs . . . . .	4.6
11. Rankings by Regions of Students, Parents, and Educators of 10 Educational Categories . . . . .	4.11
12. Rankings by Regions of Students, Parents, and Educators of the Overall Highest Ranked Educational Needs . . . . .	4.14
13. Rankings of Rural Versus Urban Residing Students and Parents of 10 Educational Categories . . . . .	4.26



Table	Page
14. Rankings of Rural Versus Urban Residing Students and Parents of 72 Educational Needs . . . . .	4.27
15. Rankings of Students, Parents, and Educators from 1A - 2A Accredited Districts of 10 Educational Categories . . . . .	4.31
16. Rankings of Students, Parents, and Educators from 1A - 2A Accredited Districts of 72 Educational Needs . . . . .	4.32
17. Rankings of Students, Parents, and Educators from 3A Accredited and Non-Accredited Districts of 10 Educational Categories . . . . .	4.31
18. Rankings of Students, Parents, and Educators from 3A Accredited and Non-Accredited Districts of 72 Educational Needs . . . . .	4.34
19. Rankings of Students, Parents, and Educators from Districts with Less than One Hundred Secondary Enrollment of 10 Educational Categories . . . . .	4.37
20. Rankings of Students, Parents, and Educators from Districts with Less than One Hundred Secondary Enrollment of 72 Educational Needs . . . . .	4.39
21. Rankings of Students, Parents, and Educators from Districts with One to Four Hundred Secondary Enrollment of 10 Educational Categories . . . . .	4.38
22. Rankings of Students, Parents, and Educators from Districts with One to Four Hundred Secondary Enrollment of 72 Educational Needs . . . . .	4.41
23. Rankings of Students, Parents, and Educators from Districts with Over Four Hundred Secondary Enrollment of 10 Educational Categories . . . . .	4.38
24. Rankings of Students, Parents, and Educators from Districts with Over Four Hundred Secondary Enrollment of 72 Educational Needs . . . . .	4.43
25. Rankings of Other Populations of 10 Educational Categories. . . . .	4.50
26. Rankings of Other Populations of 90 Educational Needs . . . . .	4.48
27. Comparison of Composite Rankings from Pilot and Statewide Assessments . . . . .	6.4
28. List of Regional Needs Differing from Statewide Needs . . . . .	6.8

Table		Page
29.	List of Needs Dependent Upon Where Respondent Lives. . . . .	6.12
30.	List of Needs Dependent Upon Accreditation Level of Respondents' Districts . . . . .	6.13
31.	List of Needs Dependent Upon Enrollment Level of Respondents' Districts. . . . .	6.15
32.	List of Needs Ranked by Other Populations Different than Composite Ranking. . . . .	6.16
33.	Listing of the Highest Ranked Educational Needs According to Their Importance as Viewed by the Justification Report Authors. . . . .	6.17

## CHAPTER I

### INTRODUCTION

#### Historical Considerations

The identification of critical educational needs for the State of North Dakota is the purpose of this report. Before presenting the results of the identification process, it will be helpful to set the stage by defining terms and discussing some historical and philosophical background.

The identification of critical educational needs was undertaken to fulfill one requirement for state assumption of responsibility for Title III of the Elementary and Secondary Education Act (ESEA) of 1965. Critical educational needs, as defined in guidelines from the U. S. Office of Education (USOE), were those educational undertakings of a state where the pupils of the state could be shown to be not receiving services as comprehensive as were provided by other states. The improvement of these services, then, becomes critical, and Title III resources can rightfully be spent on innovative approaches to resolving these critical needs.

A key philosophical point is apparent in the above definition of critical educational needs. These needs must be in areas in which students are "short-changed." In the words of the USOE guidelines, these must be "learner-oriented needs." Needs which refer to school organizational and operational problems, staffing, courses taught and their content, school plant remodeling and construction, and similar issues are not eligible for Title III, ESEA, support unless they can be shown to be directly responsible for "learner-oriented needs."

## 1.2

Returning to a historical consideration of North Dakota's assessment of critical educational needs, the phrase, "learner-oriented needs," can be considered responsible for this report as will be explained in the following paragraphs. North Dakota, in its 1969 State Plan for Title III, ESEA, presented a series of critical educational needs. The justification for considering the educational problems, cited in the 1969 State Plan, to be the State's critical needs was a Statewide Study of Education conducted by the University of North Dakota under a legislative appropriation administered by the Legislative Research Committee and a matching Title V, ESEA, grant to the Department of Public Instruction intended for strengthening that department.

After reviewing the critical needs as given in the 1969 State Plan, it was the consensus of the readers that the problems given were not sufficiently "learner-oriented" to be considered the State's critical educational needs. That this would be a fair judgment is further apparent from a review of the Statewide Study of Education. The major concerns of this study were the several issues of school district consolidation, state and local educational financing, number of course offerings per district, and staffing with qualified bachelor degree-holding teachers. Most of the reports resulting from the Statewide Study were written from the standpoint of state or local administrative needs with an underlying assumption that this would resolve most learner problems. Only very limited attention was given directly to the learner and his problems.

The recommendation of the USOE with which the Department of Public Instruction concurred was that the State reassess its critical educational needs. The emphasis of this reassessment, it was further recommended, should be placed on identifying "learner-oriented needs."



### 1.3

North Dakota, through its Title III evaluation contractor, began planning for a new assessment of critical needs in early spring of 1969 upon receipt of the recommendations of the USOE. The first preliminary statement of the plans for assessing North Dakota's critical educational needs appeared in the 1970 State Plan for Title III and is dated April 30, 1969. A copy of the Section (2.3.1) concerning identifying the state's critical needs is presented in Appendix A, since it remains the only official statement of the assessment plans.

It should be noted at this time that several changes in design, sampling, time schedule and other procedures were made from what was given in Section 2.3.1 of the 1970 State Plan. Some of these changes were the result of further recommendations of the USOE. Others were in response to practical considerations of time and financial resources encountered as the assessment study progressed. Each such change in procedures will be identified and the reasons for it will be documented at the appropriate place in the text of this report.

#### Overview of the Report

Continuing into this report the following content will be found; Chapter II will contain a comprehensive but concise description of the technical procedures employed for this need assessment study. The chapter will be presented in two major divisions in response to the two-pronged attack necessary in arriving at the critical educational needs. The first prong of this attack was to identify what the various segments of North Dakota's population felt were educational areas requiring further attention. The second prong of this attack was to document evidence which would prove whether or not each of these problem areas could justifiably be identified as critical educational needs for Title III, ESEA.

Chapters III and IV will present the results of the first prong of the attack as described in Chapter II. Chapter III presents the results of a pilot

#### 1.4

study conducted in late spring of 1969 in the Northeastern region of the state. The purpose of the pilot study was to make possible the testing of the procedures and the instrument developed for the need assessment study. Chapter IV presents the results of the statewide need assessment conducted in late fall of 1969.

Chapter V presents the results of the second prong of the attack as described in Chapter II. This chapter consists of a series of brief reports by experts in the fields of the approximately thirty highest ranked educational needs. These reports contain data comparing the status of each need in North Dakota with its status in other states or nationally. The reports conclude with recommendations as to whether or not each need should be considered critical for Title III, ESEA.

Chapter VI presents a brief summary of the information presented in the preceding chapters. It is the purpose of this chapter to glean the key information from the other chapters as a service to readers of this report. No recommendations will be given since this is the province of the State Title III Advisory Committee.

## CHAPTER II

### DESCRIPTION OF PROCEDURES

This chapter contains a comprehensive description of the procedures utilized in the need assessment study. This description will be presented under two basic headings:

1. Identification of Potential Critical Educational Needs
2. Justification of the Critical Nature of These Needs.

#### Identification of Potential Critical Educational Needs

The basic procedure for identifying potential critical needs involved utilization of an instrument with a random sample of various populations of North Dakotans. The instrument provided the randomly selected respondents an opportunity to rank those educational needs they considered to be important for initial or increased implementation within their schools or region. This section presents the procedures in two parts; procedures utilized for a pilot study and those utilized in the Statewide Study.

#### Pilot Study

Upon notification by the USOE and the Department of Public Instruction, in early spring of 1969, that a new assessment of critical educational needs would be required, the evaluation contractor began planning for this assessment. The early design of the assessment, which has been followed for the most part, was presented in the 1970 State Plan for Title III under Section 2.3.1 (see Appendix A).

## 2.2

A first step in the need assessment was immediately determined to be a pilot study for instrument development purposes and to test procedures. Such a pilot study was undertaken in late spring 1969, and has since proved to be invaluable in numerous ways. Without the pilot study, it is safe to say that it would have been impossible to meet the goal of December 31, 1969, for completion of the need assessment and this report. The remainder of this section describes the procedures used in collecting the data. Specifically, the following items will be discussed: development of the instrument, description of the populations, instrument administration procedures, and statistical treatment of the data.

Development of the Instrument Developing an instrument to measure critical educational needs presented the immediate problem upon initiating the need assessment. Such an instrument had to be simple enough for the respondent to understand and complete, yet it also had to be inclusive of the major activities related to education, particularly those considered to be learner-oriented. Since the study was to include high school seniors and parents of seniors, the language of the instrument had to be in terms lay people could understand.

A preliminary version of the pilot instrument was developed after a thorough study of many similar educational needs studies conducted in other states. This instrument was presented to a group of experienced educators attending the University of North Dakota. These educators had backgrounds in a variety of disciplines as well as common backgrounds in research methodology. They were asked to review the instrument critically, and make suggestions for improvements. Their recommendations for improvements were incorporated into a final version of the instrument.



### 2.3

The completed instrument contained eleven major subdivisions of a comprehensive educational program. These subdivisions, titled "categories" in the instrument, were:

1. Subject Fields Taught in School
2. Levels of Education
3. Counseling and Psychological Services
4. Educational Programs for Students with Particular Needs
5. In-Service Instruction for Teachers Covering Various Topic Areas
6. Teacher Personnel and the Problems Occurring with Obtaining and Retaining Teachers
7. Vocational-Technical Programs
8. School Services for Pupils
9. Instructional Approaches Used by Teachers with Students
10. Budget Allocations for the Various Aspects of Education
11. Administrative Services.

Under each of the categories was given a series of items or answer choices reflecting specific educational programs or needs related to the category title. These items were selected from a somewhat similar instrument used with educators in Wisconsin, from other studies, and from suggestions given by the educators who reviewed the preliminary version of the instrument. For example, under the major category title, Subject Fields..., programs such as Foreign Language, Fine Arts, and Science were listed. Altogether, 110 items were included under the eleven categories.

The educators who reviewed the preliminary version of the instrument suggested that asking the respondents to rank all 110 items would demand too much time and would cause the respondents to rank the items indiscriminately or refuse to complete the instrument. Therefore, the eleven categories were randomly divided into two sets of six categories each resulting in two forms of this instrument. (Category 6, Teacher Personnel..., was common to both forms of the instrument.) Copies of the two forms were alternated to insure that the return would contain a nearly equal number of each. The student forms were further

## 2.4

shortened by the elimination of categories (5) In-Service Instruction..., (6) Teacher Personnel..., and (11) Administrative Services, since high school seniors do not usually have contact with, or understanding of, the activities listed under these categories.

Brief explanations of the category titles were given to establish the same frame of reference for all respondents and to enable the lay respondents to meaningfully consider the items within each category. A list of the major category titles was also attached to both forms of the instrument. All respondents were asked to rank, from 1 to 5, the five categories which they felt most needed improvement with number 1 indicating the category most needing improvement. Then the respondents were asked to rank in a similar manner five items within each category in the form of the instrument which they were sent. At the suggestion of the educators who reviewed the preliminary version of the instrument, only five items within a category were ranked since it was felt that only the first few items in order of importance could be meaningfully ranked.

See Appendix B for a copy of the eleven categories included in the two forms of the instrument. Also included in Appendix B will be the cover letters used to describe the pilot study to the respondents.

Description of the Populations The populations for this study included all high school seniors, their parents and educators from twenty-three selected high school districts located in an eight-county region of Northeastern North Dakota. The counties comprising this eight-county region were Cavalier, Pembina, Walsh, Nelson, Grand Forks, Griggs, Steele, and Trail.

There were forty-seven high school districts in this eight-county region. The districts were grouped by the accreditation levels assigned to them by the State Department of Public Instruction. The State Department of Public Instruction assigns four accreditation levels; 1A, 2A, 3A and non-accredited. These ratings are based on an evaluation of the school's total program according to predetermined standards and are fully explained in the North Dakota Administrative Manual (1967). In the eight-county region there were three 1A school districts, eight 2A school districts, twenty-four 3A school districts, and twelve non-accredited school districts. The few 1A school districts were combined with the 2A school districts to form a group of eleven districts.

The resultant three groups of school districts were numbered consecutively. The school districts to be used in this study were randomly selected, using a table of random numbers (choosing page, row, and column in the recommended way). A proportionate sample of three districts was selected from the 1A-2A group, eight districts from the 3A group, and four districts from the non-accredited list. The seniors, parents of seniors, and educators from the fifteen randomly selected districts comprised the population to be studied from these districts.

Before the administration of the instrument was conducted, the Upper Red River Valley Project (URRVP), a Title III, ESEA, project serving much the same area used in this study asked to have eight additional school districts in the eight-county region included in the study to give them guidance in planning future activities and services. The rankings of each population, seniors, their parents, and educators from the randomly selected districts, were compared statistically to the like populations from the URRVP districts. Since the

statistical comparisons revealed no differences between the two groups of districts, the data from the eight URRVP school districts were combined with the randomly selected districts to give the total of twenty-three districts used in this study.

Instrument Administration Procedures Each superintendent of the selected school districts was contacted by telephone and agreed to administer the instrument. All the instruments were mailed to the superintendent. He was asked to have seniors complete their instruments at school and to mail all the completed senior forms back in an enclosed envelope. The parent instrument was attached to the senior form and the seniors were asked to take it home, give it to their parents to complete and to mail back in an attached postage paid envelope. The educator instrument was to be distributed to the educators and returned by them in an attached postage paid envelope. The two forms of the instrument were alternated for each population. Further, the parents of each senior were given the opposite form of the instrument completed by their child, thus reducing the chances of contamination between student and parent.

A post card follow-up was conducted of the parents two weeks after the initial administration. Two weeks later a second copy of the instrument was sent to the parents who still had not responded.

Statistical Treatment of the Data The fact that respondents were asked to rank only five of the major categories and also five of the activities found under each major category presented a problem in calculating a mathematical value so that the eleven categories and 110 activities could be listed in the order of their importance. It was necessary to develop a weighting formula to establish an adjusted mean for each of the categories and activities. The weighting



## 2.7

formula was based on the per cent of responses to each item. Assuming for example that 50 per cent of the respondents ranked an item from 1 to 5, the mean response of the 50 per cent was first calculated, resulting in a mean value falling between 1.0 and 5.0. This mean was then weighted using the following proportion to get an adjusted mean for a 100 per cent response.

$$\frac{\text{Actual mean for those responding}}{\text{Percentage of all respondents responding}} = \frac{\text{Adjusted Mean}}{100 \text{ per cent}}$$

In the example given, the weighted mean would be double the mean obtained from the responses of the 50 per cent who ranked the item.

To take into consideration the rankings of the major categories, the weighted category means were determined in a similar manner and added to the adjusted mean of all activities within each category. This final adjusted mean became the basis for listing the activities in the order of their importance.

Tables were prepared enabling visual comparisons to be made of the various combinations of listings. Since the results were to be learner-oriented, senior rankings were used as the base group for listing the activities.

Kendall's Coefficient of Concordance W was a statistical test used to derive a correlation among comparisons of three or more groups. Spearman's Rank Correlation Coefficient was used to compare all groups of two. According to Seigal (1956), Spearman's Rank Correlation Coefficient is a measure of association that can be used when the data are in ordinal scale so the objects or individuals under study can be ranked in two ordered series. Unfortunately, only a .20 correlation is necessary for .01 significance. Since all calculated correlations were higher than .70, all the correlations were significant and will not be discussed further when reporting results.

### Statewide Study

The procedures utilized in the statewide need assessment were quite similar to those described in the previous section for the pilot study. Modifications in procedures which have taken place will be described under the same four headings used for the pilot study.

Development of the Instrument The instrument used for the statewide need assessment was substantially the same as that used in the pilot study. A copy of the final instrument used in the statewide assessment, along with the various cover letters included to explain the study, are attached as Appendix C.

Modifications in the instrument occurred as the result of four activities. First, respondents to the pilot study indicated uncertainty about the meaning of certain items or categories. Modifications were made in wordings in order to clarify those items or categories.

Second, the State Title III Advisory Committee was presented the overall results of the pilot study. At the same time they were apprised of the instrument and requested to suggest improvements which were made.

Third, in order to reduce printing costs and the number of pages in the instrument, two categories, rather than one, were printed on a page. (Compare the pilot and statewide instruments found in Appendices B and C, respectively.) This suggested that either one more or one fewer categories would be optimum. It was decided, after reviewing the results of the pilot study, that categories (6) Teacher Personnel..., and (11) Administrative Services, could be combined.

Finally, in order to facilitate data processing, it was decided to limit the number of items to ten per category. This was done by again reviewing the results of the pilot study in order to identify those items which were ranked

very low. Also, all the items were reviewed for duplication of item content and for pairs of items which could be rewritten as one.

Modifications in the instrument thus consisted of the following types:

(1) combining of two categories into one, (2) deletion or combination of items so that no more than ten items were included in each category, (3) rewording of items as a means of clarifying their meaning, and (4) rewording of the introductory paragraph describing the content of each category. Comparison of the pilot and statewide forms of the instrument as found in Appendices B and C, respectively, will reveal the specific changes which were made.

The completed instrument contained the following material: a cover letter and certain biographical data, depending upon what population the respondent represented, on page one of the instrument; directions for responding and a category using as items the other ten category titles as page two; and four categories, two each, on pages three and four. Two forms of pages three and four were used, resulting in two forms of the instrument. While these four pages constituted the student forms of the instrument, the several adult populations also received a fifth category and a series of questions intended for another phase of the Title III evaluation as pages five and six of their respective two forms. Finally, educators received, in addition, another instrument, the Purdue Teacher Opinionnaire, also intended for another phase of the evaluation.

The following are the titles of the ten categories included in the statewide instrument:

1. Subject Fields Taught in School
2. Levels of Education
3. Counseling and Psychological Services
4. Educational Programs for Students with Particular Needs
5. Vocational-Technical Programs

6. School Services for Pupils
7. Instructional Approaches Used by Teachers with Students
8. Budget Allocations
9. On-the-Job Training for Teachers Covering Various Topic Areas (Adults only)
10. Administrative Services and Teacher Personnel (Adults only).

These ten major categories contained ten items each, resulting in a total of 100 items to be ranked.

Description of the Populations The basic populations for this study consisted of students, their parents, educators, and in addition, school board members. The students consisted of seniors representing the secondary students and eighth graders representing the elementary students.

These populations were obtained from school districts selected as representative of eight regions into which the state was divided according to the map included in the 1970 Title III State Plan and attached as Appendix D. Within each region, the largest city was included as representative of the urban population, and an elementary/junior high and a high school were randomly selected. Seventy-five eighth and twelfth grade instruments, to be given to three representative classes at each grade level, and sufficient educator forms for all teachers in these schools, were distributed. Further, 46 districts accredited 2A or lower (the smaller districts with less than 400 secondary enrollment) were randomly selected, and sufficient instruments for all eighth and twelfth grade students and all educators were distributed. The criteria used for randomly selecting these districts were regional enrollment figures and the number of districts of each accreditation level within each region as shown in Figure 1.



FIGURE 1

## SUMMARY OF STATEWIDE ASSESSMENT SAMPLING PROCEDURES

Region <sup>a</sup> Enrollment <sup>b</sup>	Per Cent of State Enrollment	Total Districts in Sample <sup>c</sup>	Number Districts /		Per Cent of Regional Total /	Number in Sample <sup>d</sup>
			< 100 Pupils	100-199 Pupils	200-399 Pupils	
1	2,887	9.829	4,521	11/50.0/ 2	4/18.2/ 1	7/31.8/1
2	2,123	7.228	3,325	9/50.0/ 2	9/50.0/ 1	0/ 0.0/0
3	2,628	8.947	4,116	13/59.1/ 2	5/22.7/ 1	4/18.2/1
4	4,809	16.373	7,532	27/58.7/ 4	15/32.6/ 3	4/ 8.7/1
5	3,946	13.435	6,180	23/60.5/ 4	11/29.0/ 2	4/10.5/1
6	3,659	12.457	5,730	18/60.0/ 3	7/23.3/ 1	5/16.7/1
7	3,906	13.298	6,117	25/64.1/ 4	11/28.2/ 2	3/ 7.7/1
8	5,414	18.433	8,479	29/58.0/ 5	13/26.0/ 2	8/16.0/1
	29,372	100.000	46,000	155/58.5/26	75/28.3/13	35/13.2/7

2.11

<sup>a</sup>See map of regions in Appendix D.

<sup>b</sup>Enrollment includes all secondary (9-12) students in those districts with less than 400 secondary (9-12) enrollment according to the 1968-69 State School Directory. (Districts with more than 400 secondary enrollment were represented by inclusion of the largest district in each region as part of the total population.)

<sup>c</sup>Determined by multiplying Per Cent of State Enrollment times 46 districts in sample.

<sup>d</sup>The number of districts under each enrollment heading for each region was calculated by first determining the percentage of each region's total districts which fell under each enrollment heading as shown in the second columns. This per cent was multiplied times the Total Districts in Sample for the region. Where the resultant number was within  $\pm 25$  of a whole number, the whole number was used. When the deviation from a whole number was greater than  $\pm 25$ , the two most closely related enrollment levels were used with one being randomly selected to include the extra district. For example, under Region 2, the first two enrollment levels each had 50 per cent of the region's districts. Each level should have 1.662 of the Total Districts in Sample for Region 2. By random selection, it was determined that the extra district should be included from those districts with less than 100 enrollment.

Other populations included in this study were the following:

Welfare Recipients Welfare Boards in ten randomly selected counties were each given a packet of fifty instruments to distribute to all recipients visiting the offices on a selected date.

Retired People Thirteen randomly selected clubs for older people were each sent packets of instruments to distribute to members of the club.

College Graduates College graduates of the University of North Dakota who migrated to selected states were sent copies of the instrument. The states selected were Minnesota, North Carolina, Oregon, and Rhode Island. The graduates were further limited to those having graduated since 1965 numbering approximately five hundred.

High School Dropouts The North Dakota Employment Service maintains records of dropouts for a follow-up program they conduct. The State Office of the Employment Service was given copies of the instrument to distribute through local offices to recent dropouts.

Migrants A recent USOE funded study identified former North Dakotans and their present addresses. These out-migrants, numbering approximately five hundred, were mailed a copy of the instrument and requested to respond.

Each of these populations was intended to serve as a check upon the responses of the students, parents, and educators. As such, only overall results will be determined and presented at the end of Chapter IV for each of these populations.

It was suggested, in Section 2.3.1 of the 1970 Title III State Plan, that other populations might be involved in this study. Economic considerations and the problems of obtaining names from which to select a random sample were

## 2.13

reasons for discarding this possibility. But further contemplation indicates that this should not be a serious drawback. The populations that are included represent all but the unmarrieds, those young people from twenty to thirty and those between fifty and sixty-five. Certainly the very old and very poor are included--the two groups most likely to be negative to any increase in educational expenditures. Also, the migrants and college graduates who have left North Dakota are included as a means of identifying what needs would be suggested by those with experience in other states. Thus, this modification in Section 2.3.1 would not appear to be a limitation of this study.

Instrument Administration Procedures The administration procedures were also quite similar to those used in the pilot study. Each superintendent of the selected school districts was contacted by telephone and asked to cooperate. The number of instruments required in each school was determined in this manner as well. Sufficient questionnaires, along with directions, were sent to each school. Again, the student forms were completed in class with the students being requested to detach and take home the parent form. One change in procedure with the educator form was to request that they be distributed and completed in a teachers' meeting. The teachers still returned their forms using an attached envelope as a means for preserving confidentiality of response.

These procedures meant that follow-up of student and educator forms would not be necessary. But parent returns would be somewhat lower for numerous reasons including that some students would not take the parent form home. Thus, an optional question asked for the student's name and address. Each pair of student and parent forms was given the same identification number so that it would be possible to submit another instrument to non-responding parents.

## 2.14

As a procedure to reduce the volume of key punching otherwise required by this volume of data, the students and educators were given a special answer sheet upon which to mark their responses. This answer sheet could be processed by an IBM 1230 optical mark scanner with output consisting of punched cards. This procedure was not used with parents since it was felt that many parents have not had experience with this type of answer sheet.

Statistical Treatment of the Data The statistical treatment, as described under the pilot study, was found to be highly satisfactory. No modifications in these procedures were required.

One important aspect of the statistical procedures not yet touched upon is the measurement of the validity and reliability of the instrument. It was determined early in the pilot study that the comprehensiveness of the instrument, as compared to other need assessments and as indicated by educators who reviewed the instrument, speaks highly of its face validity. More technical measures of validity, such as predictive validity, are not necessary when the purposes for which the data gathered with the instrument are considered.

Reliability, on the other hand, is quite important. Section 2.3.1 of the 1970 State Plan for Title III indicates that reliability, and validity as well, would be measured through several meetings held throughout the state. That this might be an ideal procedure, especially for measuring validity, is not questioned, but it proved too costly and time-consuming. Thus, Section 2.3.1 was modified, deleting any measure of reliability on the pilot study. But a test-retest measure of reliability over a four to six week period in two randomly selected schools was undertaken in the statewide study. Only students and educators were requested to complete this follow-up. The standard reliability

formula for test-retest was used. Also, the split-half reliability coefficient was calculated.

Other modifications in Section 2.3.1 of the State Plan which should be noted follow: first, it was suggested that studies be made in order to obtain evidence justifying the critical nature of the various highly ranked needs. But the specialists in the area of each need who were selected to write brief reports concerning the status of the need did not feel such studies were required in order for them to obtain data justifying whether or not each need was critical.

Second, it was suggested that particular attention would be paid to the Minneapolis-St. Paul urban region when justifying the critical nature of the needs since so many young North Dakotans migrate there. But data from this area which could be compared to North Dakota data were found to be hard to obtain.

#### Justification of the Critical Nature of these Needs

The operational definition for justification of critical needs which was used in conducting the needs assessment is given in Section 2.3.1, part 3a, of the 1970 Title III State Plan. This definition is quoted in its entirety below:

Provision of evidence to justify the critical nature of these needs is a recognition that a need might be critical to educators and adults, but the hard facts comparing North Dakota to the national norms might show pupils no worse off or even better in relation to this need than pupils from other states. Certainly first attention must be given to those needs where it can be shown that graduates of North Dakota schools are "shortchanged" in comparison to pupils from other states. These truly are the critical needs of the state.

The procedures utilized to identify evidence justifying whether a need was critical or not are actually quite simple. First of all, it was necessary to identify what needs were to be included in the justification study. An arbitrary

decision was made that only those needs ranked in the upper third by students, adults, and educators would be considered. This meant that approximately thirty needs would be included.

The time schedule for conducting the statewide assessment and justifying the critical nature of the needs as given in Section 2.3.1, part 3g, of the 1970 State Plan, indicates that these two activities overlapped. Because of the urgency of identifying the critical state needs, it was necessary to proceed with justifying the needs using the rankings obtained through the pilot study and reported in Chapter III. That it was reasonable to expect little change in statewide rankings from what was obtained in the Northeastern region appeared logical. Thus, the pilot needs assessment again proved to be invaluable.

The second step was to identify for each need a person with a professional background in the area of the need and knowledgeable about the status of the need in North Dakota. This person was requested to write a brief report detailing the major evidence identifying the status of the need in North Dakota and nationally, and reaching a decision whether or not the need is a critical area for the state. A contract agreement given to each of these persons which also specifies in more detail the procedures they were to follow is included as Appendix E.

Since the various needs were already grouped by category, it was possible to identify at least several needs each person could study. Thus, in Chapter V the reports justifying the critical nature of the needs will be presented in groupings such as counseling, vocational, etc., rather than in the order in which the needs were ranked.



One limitation should be evident in this procedure; only one person was utilized to justify the critical nature of each need. Actually, this limitation is not as serious as it might appear at first glance. First, whenever possible a second person in the same field was requested to read the report for any obviously overlooked evidence. Secondly, a number of qualified educators, including the project evaluator, the report editor, and several graduate students, read these reports. Third, it was not intended that these reports be all-inclusive. They were to be brief, incorporating the major evidence (requiring a value judgment) showing the status of the need in the state compared to its national status. Fourth, the conclusions found in these reports will not be accepted at face value. Instead, a group of highly competent educators and lay people, the Title III Advisory Committee, with the assistance of the staff of the Department of Public Instruction, will further study these needs before passing judgment on the conclusions reached in these need-justification reports.

The summary presented in Chapter VI will contain a list of those needs which the writers of the reports listed as critical areas, another list of those which were debatable as critical, and a third list of those which were judged not critical. Again, this is in the judgment of the report writers and in no way should be determined as the recommendation of the state evaluator or as the conclusion of this report. It is simply a summary intended solely to be thought-provoking.

## CHAPTER III

### RESULTS OF THE PILOT NEEDS ASSESSMENT

The instrument whose development was described in Chapter II was administered to seniors, their parents, and educators in the twenty-three districts selected as specified in Chapter II. The district superintendents were contacted in order to secure their cooperation and to determine how many copies of the instrument were required. No follow-up of the senior form was required since in all but three schools the instruments were administered during class. Also, no follow-up of the educators was possible since names were not requested in order to preserve confidentiality of responses. But the parent non-respondents were known, since the parent and student forms were numbered the same and the students were requested to give their names and home addresses. Both a post card and a second copy of the questionnaire were utilized to secure additional parent returns.

The twenty-three school districts reported a total of 823 seniors and 570 educators. Usable returns were received from 574 seniors, 320 parents, and 316 educators. The senior return of 70 per cent was somewhat lower than expected due to the faulty administration in three schools. The parent return was 54 per cent based on completed student instruments. The educator return was 55 per cent. The fact that the instrument was administered during the last week or two of school may have had some influence on the per cent of returns.

The results of most interest are the overall rankings by all three populations. Table 1 presents the rankings by the three groups (seniors, their

parents, and educators) of the eleven categories of educational needs. Category 4, Educational Programs for Students with Particular Needs, and Category 3, Counseling and Psychological Services, were ranked 1-2 respectively by each of the three groups. Particular attention should be given Category 5, In-Service Instruction for Teachers..., which educators ranked sixth in order of importance, and Category 6, Teacher Personnel..., which educators ranked eleventh in importance; the exact opposite of the rankings assigned these two categories by seniors and their parents.

TABLE 1  
RANKINGS OF SENIORS, PARENTS, AND EDUCATORS  
OF 11 EDUCATIONAL CATEGORIES

CAT. NO.	MAJOR CATEGORIES	STUDENTS RANK	PARENTS RANK	EDUCATORS RANK	COMPOSITE RANK
1	Subject Fields Taught in School	5	5	8	6
2	Level of Education	11	9	10	11
3	Counseling & Psychological Svs.	2	2	2	2
4	Educational Programs for Students with Particular Needs	1	1	1	1
5	In-Service Instruction for Teachers Covering Various Topic Areas	10	11	6	10
6	Teacher Personnel & Problems Obtain- ing and Retaining Teachers	7	7	11	7.5
7	Vocational-Technical Programs	3	3	4	3
8	School Services for Pupils	6	4	3	4
9	Instructional Approaches Used by Teachers with Students	4	6	5	5
10	Budget Allocations for Various Aspects of Education	8	10	7	7.5
11	Administrative Services	9	8	9	9

Table 2 presents the rankings for the three groups of 79 of the 110 items listed under eight of the eleven categories of educational needs. The items are given in order of their ranking when using as the number to rank the sums of the individual rankings given each item by the populations--seniors,

TABLE 2  
RANKINGS OF SENIORS, PARENTS, AND EDUCATORS  
OF 79 EDUCATIONAL NEEDS

CAT. NO.	EDUCATIONAL NEEDS	STUDENTS RANK	PARENTS RANK	EDUCATORS RANK	COMPOSITE RANK
4	Program for Slow Learners	1	1	1	1
4	Program for Alienated Youth	2	2	2	2
3	Personal Counseling	3	3	5	3
3	Educational-Vocational Guidance	4	5	11	5
1	Foreign Languages	5	15	50	16
7	Skilled Trades	6	4	6	4
8	Junior High School Guidance Svs.	7	9	18	8
9	Individualized Instructional Prog.	8	28	14	10
3	Advisory Services to Teacher for Student Problems	9	8	9	6.5
4	Program for Academically Talented	10	27	3	9
7	Human Services	11	10	30	11
7	Applied Arts	12	41	38	30
4	Prog. for Students Terminating Education with High School	13	6	7	6.5
7	Electronics	14	23	36	19
3	Group Counseling	15	36	42	31
4	Program for Educationally Disadvantaged	16	21	41	22.5
4	Program for Average Pupils	17	30	24	17.5
8	Post-Graduation Employment Spec.	18	14	49	25
3	Psychological Testing	19	40	26	27
7	Agricultural	20	25	19	14
1	Fine Arts	21	29	51	36
1	Language Arts	22	22	46	28.5
7	Business	23	7	35	15
9	Non-Graded Program	24	56	31	41
8	School Psychologist	25	33	20	22.5
1	Science	26	20	56	37.5
1	Mathematics	27	17	55	34.5
1	Practical Arts	28	13	53	32
9	Resource Persons for Use in the Classroom	29	38	23	28.5
9	Teacher Aides	30	35	12	21
9	Audio-Visual Instruction	31	49	32	42.5
7	Auto Shop	32	46	29	39
8	Academic Placement Specialist	33	32	48	44
9	Team Teaching	34	48	27	40
8	Speech Therapist	35	18	10	13
1	Social Studies	36	47	60	49
7	Industrial	37	24	21	26
4	Program for Mentally Handicapped	38	16	17	17.5

TABLE 2--Continued

CAT. NO.	EDUCATIONAL NEEDS	STUDENTS RANK	PARENTS RANK	EDUCATORS RANK	COMPOSITE RANK
8	Social Worker	39	45	39	46
8	Remedial Reading Specialists	40	12	4	12
8	School Health Nurse	41	26	28	33
1	Health & Physical Education	42	34	59	47
9	Televised Educational Programs	43	53	52	52
4	Program for Emotionally Disturbed	44	19	13	20
8	External Sources of Referral for Children	45	44	25	45
1	Home Economics	46	11	22	24
3	Elementary School Guidance Services	47	37	15	34.5
9	Instruction for Home Bound Students	48	42	57	51
10	Classroom Facilities & Equipment	49	58	33	48
9	Closed Circuit TV in Schools	50	78	74	69
10	Libraries and Instructional Center Facilities	51	61	34	50
10	Specialized Personnel	52	59	45	53.5
8	Learning Disabilities Teacher	53	43	16	42.5
10	Textbooks and Instructional Supplies	54	63	40	55
9	Computer Assisted or Managed Instr.	55	73	75	70
9	Programmed Instruction	56	69	47	58
10	Teaching Personnel	57	62	37	53.5
7	Appliance & Small Motor Repair	58	51	54	56
10	Audio-Visual Materials & Equip.	59	71	44	59
4	Program for Physically Handicapped	60	39	72	57
3	Follow-up of Graduates	61	67	71	68
3	Pre-School Guidance Service	62	65	61	63
8	Special Ed. Teacher for Retarded	63	31	8	37.5
10	Building Maint. & Operation	64	72	69	71.5
4	Prog. for Culturally Distinct	65	77	77	75.5
10	Transportation	66	70	79	74
2	Kindergarten Education	67	50	58	60
2	Junior High School Education	68	54	64	62
2	Senior High School Education	69	55	67	66
2	Adult Education	70	57	63	65
2	Post-Secondary Voc-Tech. Education	71	52	62	61
2	Primary Education	72	60	65	67
2	Intermediate Level Education	73	66	66	71.5
2	Junior College	74	64	73	73
2	Early Childhood Education	75	76	68	75.5
10	Adm. & Supervisory Personnel	76	74	70	77
2	College-University Education	77	75	76	78
10	Paraprofessional Personnel	78	68	43	64
2	Infant Education	79	79	78	79

their parents, and educators. Since seniors were not requested to respond to Categories 5, In-Service Instruction for Teachers..., 6, Teacher Personnel..., and 11, Administrative Services, the items under these categories could not be included in the rankings for seniors. Table 3 presents the rankings by only parents and educators when including all eleven categories and 110 items. The first result of note is that none of the items from the three categories not ranked by seniors appeared in the upper third highest ranked items by parents and educators. Since the three deleted categories all reflect administrative or organizational needs and not necessarily learner needs, it is significant that these items which learners (the seniors) usually are not familiar with were not ranked in the upper third of the items.

Returning to a consideration of the twenty-five most critical educational needs as reflected by these items, it is evident that the three groups differed, in some cases considerably, on what these items should be. The first page of Table 16 includes the first twenty-five items ranked on the composite sums of the individual rankings given each item by each of the groups; seniors, their parents, and educators.

Selecting a few of the items where the most serious discrepancies in rankings between the three groups occurred, consideration should be given to foreign language (composite rank 16), applied arts (30), group counseling (31), post-graduation employment specialist (25), fine arts (36), non-graded program (41), science (37.5), mathematics (34.5), practical arts (32), remedial reading specialists (12), program for emotionally disturbed (20), elementary school guidance service (34.5), learning disabilities teacher (42.5), and special education teachers for retarded (37.5). The first six through non-graded programs, are items ranked by seniors within the twenty-five most critical needs, but ranked by

TABLE 3

RANKINGS OF PARENTS AND EDUCATORS  
OF 110 EDUCATIONAL NEEDS

CAT. NO.	EDUCATIONAL NEEDS	PARENTS RANK	EDUCATORS RANK	COMPOSITE RANK
4	Program for Slow Learners	1	1	1
4	Program for Alienated Youth	2	2	2
3	Personal Counseling	3	5	3
7	Skilled Trades	4	6	4
3	Educational-Vocational Guidance	5	11	6.5
4	Program for Students Terminating Education with High School	6	7	5
7	Business Courses	7	37	18.5
3	Advisory Services to Teacher for Student Problems	8	9	8
3	Junior High School Guidance Service	9	18	9
7	Human Services Courses	10	32	16.6
7	Home Economics	11	23	14
8	Remedial Reading Specialists	12	4	6.5
1	Practical Arts	13	60	34
8	Post-Graduation Employment Specialist	14	54	30
1	Foreign Languages	15	56	32
4	Program for Mentally Handicapped	16	17	13
1	Mathematics	17	64	38
8	Speech Therapist	18	10	10
4	Program for Emotionally Disturbed	19	13	12
1	Science Courses	20	66	42.5
4	Program for Educationally Disadvantaged	21	45	29
1	Language Arts	22	51	34
7	Electronics	23	38	26
7	Industrial	24	21	20
7	Agricultural	25	19	18.5
8	School Health Nurse	26	29	24.5
4	Program for Academically Talented	27	3	11
9	Individualized Instructional Programs	28	14	16.5
1	Fine Arts	29	57	42.5
4	Program for Average Pupils	30	25	24.5
8	Special Education Teacher for Retarded	31	8	15
8	Academic Placement Specialist	32	53	41
8	School Psychologist	33	20	22
1	Health and Physical Education	34	69	47
6	Ways for Evaluating Teacher Effectiveness	35	81	54
9	Teacher Aides	36	12	21
3	Group Counseling	37	46	39
6	Quality of Teacher Candidates	38	87	51
3	Elementary School Guidance Service	39	15	23
9	Resource Persons for Use in the Classroom	40	24	28



TABLE 3--Continued

CAT. NO.	EDUCATIONAL NEEDS	PARENTS RANK	EDUCATORS RANK	COMPOSITE RANK
4	Program for Physically Handicapped	41	99	74
3	Psychological Testing	42	27	34
6	Methods of Teacher Selection	43	91	68.5
7	Applied Arts	44	40	40
9	Instruction for Home-Bound Students	45	67	52
8	Learning Disabilities Teacher	46	16	27
3	External Sources of Referral for Children with Problems	47	26	34
8	Social Worker	48	42	44.5
7	Auto Shop	49	30	36
11	Research	50	72	58
1	Social Studies	51	70	56.5
9	Team Teaching	52	28	37
11	School-Community Relations	53	75	64
6	Teacher Involvement in Decision Making	54	85	72
6	Teacher Utilization and Specialization	55	83	71
9	Audio-Visual Instruction	56	34	44.5
11	Curriculum Development	57	73	65.5
2	Kindergarten Education	58	68	62.5
7	Appliance and Small Motor Repair	59	61	55
2	Post-Secondary Voc-Tech. Education	60	76	70
11	Supervision of Instruction	61	90	81
6	Systems of Incentive	62	79	76
6	Supply of Teacher Candidates	63	95	88
9	Televised Educational Programs	64	59	59.5
2	Junior High School Education	65	78	77.5
2	Senior High School Education	66	89	85.5
9	Non-Graded Program	67	33	46
11	Pupil Personnel Services	68	84	82
11	Community Analysis	69	86	86.5
2	Adult Education	70	77	79.5
10	Classroom Facilities and Equipment	71	35	48
11	Staff Personnel Services	72	71	77.5
10	Specialized Personnel	73	50	59.5
2	Primary Education	74	80	86.5
10	Libraries and Instructional Center Facilities and Equipment	75	36	50.5
10	Teaching Personnel	76	39	53
10	Textbooks and Instructional Supplies	77	44	56.5
2	Junior College	78	100	96
6	Coping with Teacher Militancy	79	96	95
3	Pre-School Guidance Service	80	74	83.5
11	Business Management	81	103	98
2	Intermediate Level Education	82	88	93.5
3	Follow-Up of Graduates	83	98	97

TABLE 3--Continued

CAT. NO.	EDUCATIONAL NEEDS	PARENTS RANK	EDUCATORS RANK	COMPOSITE RANK
10	Paraprofessional Personnel	84	47	67
11	School Facility Planning	85	82	91
6	The Problem of High Teacher Turnover	86	101	100
5	Instruction in Pupil Guidance	87	43	65.5
9	Programmed Instruction	88	52	74
5	Instruction in Developing Pupil Motivation	89	22	50.5
10	Transportation	90	109	104.5
10	Audio-Visual Materials and Equipment	91	49	74
10	Building Maintenance and Operation	92	94	99
5	Instruction in Teaching Students with Learning Disabilities	93	41	68.5
9	Computer Assisted or Managed Instruction	94	105	104.5
5	Instruction in Individualizing the Learning Process	95	31	62.5
11	Data Processing	96	104	106
10	Administrative and Supervisory Personnel	97	97	102
2	College-University Education	98	106	107
5	Instruction in Curriculum Development	99	48	79.5
5	Instruction in Subject Matter Content	100	63	90
5	Instruction in Use of Educational Research	101	92	101
5	Instruction in Selection and Use of Audio- Visual Aids	102	55	87
2	Early Childhood Education	103	93	103
5	Instruction in Using Team Teaching	104	58	89
5	Instruction in Evaluation of Standardized Tests	105	65	93.5
5	Instruction in Using Teacher Aides	106	62	92
4	Program for Culturally Distinct	107	107	108
9	Closed Circuit TV in the Schools	108	102	49
5	Instruction in Use of the Computer as an Instructional Tool	109	110	110
2	Infant Education	110	108	109

parents and/or educators at least thirty rankings lower in importance, i.e., foreign language, ranked 5 by seniors, 15 by their parents, but 50 by educators. The next three, science, mathematics and art, were ranked by parents within the twenty-five most critical, but educators ranked them at least thirty rankings lower in importance. The final five items on the list reflect those ranked in the top twenty-five by educators, but which parents and/or seniors disagree with by at least thirty rankings.

Among the four major objectives of the needs assessment as indicated in Section 2.3.1, part 3d, of the 1970 Title III State Plan will be found the question, "What rural-urban differences exist?" The data obtained through the pilot study partially speak to this issue in two manners; first, the students were requested to indicate whether they lived on the farm or in town. The results obtained when grouping students and their parents on this dichotomy will be found in Tables 4 and 5. Secondly, the students, parents, and educators were subgrouped on the basis of school accreditation level. Since school accreditation is usually closely related to size of school and the rural-urban dichotomy, the results obtained when using this comparison will be found in Tables 6 and 7.

TABLE 4

RANKINGS OF RURAL AND URBAN STUDENTS AND PARENTS  
OF 11 EDUCATIONAL CATEGORIES

CAT. NO.	MAJOR CATEGORIES	URBAN STUDENT	RURAL STUDENT	URBAN PARENT	RURAL PARENT	COMPOSITE RANK
1	Subject Fields Taught in School	5	5	5	4	4
2	Level of Education	11	11	10	9	10
3	Counseling and Psychological Services	2	2	3	2	2
4	Educational Programs for Students with Particular Needs	1	1	1	1	1
5	In-Service Instruction for Teachers Covering Various Topic Areas	10	10	11	11	11
6	Teacher Personnel & Problems Obtain- ing and Retaining Teachers	7	8	6	7	7
7	Vocational-Technical Programs	3	3	2	3	3
8	School Services for Pupils	6	6	4	5	5
9	Instructional Approaches Used by Teachers with Students	4	4	9	6	6
10	Budget Allocations for Various Aspects of Education	9	7	7	10	8.5
11	Administrative Services	8	9	8	8	8.5

TABLE 5

RANKINGS OF RURAL AND URBAN STUDENTS AND PARENTS  
OF 79 EDUCATIONAL NEEDS

CAT. NO.	EDUCATIONAL NEEDS	URBAN STUDENT	RURAL STUDENT	URBAN PARENT	RURAL PARENT	COMPOSITE RANK
4	Program for Slow Learner	1	1	1	1	1
4	Program for Alienated Youth	2	3	3	3	2.5
3	Personal Counseling	3	2	2	3	2.5
3	Educational-Vocational Guidance	4	4	4	4	4
i	Foreign Languages	5	5	14	17	9
7	Skilled Trades	6	6	5	5	5
3	Junior High School Guidance	7	8	7	18	7.5
3	Advisory Services to Teachers for Student Problems	8	12	8	11	6
9	Individualized Instruction	9	7	20	42	15.5
4	Program for Average Pupils	10	20	21	34	17
4	Program for Students Terminating High School	11	15	6	8	7.5
3	Group Counseling	12	19	46	32	27.5
4	Program for Academically Talented	13	10	22	33	11.5
4	Program for Educationally Disadv.	14	16	11	29	13
7	Electronics Courses	15	13	19	28	14
1	Fine Arts	16	30	31	30	24.5
7	Human Services - Teaching	17	9	9	12	10
7	Applied Arts	18	11	26	51	23
8	Post-Graduation Employment Spec.	19	18	18	13	12
1	Language Arts	20	26	17	25	21.5
7	Business	21	24	13	6	11
7	Agricultural	22	17	45	14	21.5
1	Science	23	27	16	20	18.5
3	Psychological Testing	24	14	34	39	30
8	School Psychologist	25	21	39	23	26
9	Non-Graded Program	26	23	51	68	45
1	Mathematics	27	29	15	20	20
9	Audio-Visual Instruction	28	39	50	53	46
1	Social Studies	29	42	49	43	41.5
9	Resource Persons for Use in Class	30	39	30	46	37
1	Practical Arts	31	25	12	19	18.5
7	Auto Shop	32	38	44	37	38
9	Teacher Aides	33	32	29	44	36
9	Team Teaching	34	40	40	52	43
1	Health & Physical Education	35	49	42	31	39
8	Speech Therapist	36	33	28	10	24.5
9	Televised Educational Programs	37	47	41	66	49.5
7	Industrial	38	34	24	22	32
4	Program for Emotionally Disturbed	39	43	10	24	31
8	Academic Placement Specialist	40	28	38	26	35

TABLE 5--Continued

CAT. NO.	EDUCATIONAL NEEDS	URBAN STUDENT	RURAL STUDENT	URBAN PARENT	RURAL PARENT	COMPOSITE RANK
8	Social Worker	41	37	47	36	40
3	External Sources of Reference	42	45	35	41	41.5
3	Elementary School Guidance	43	51	33	40	44
8	Remedial Reading Specialist	44	35	23	7	27.5
8	School Health Nurse	45	36	32	16	34
4	Prog. for Mentally Handicapped	46	22	27	15	28
9	Instruction for Home-Bound Students	47	48	37	45	47
9	Programmed Instruction	48	62	57	76	60
7	Home Economics	49	41	25	9	33
10	Classroom Facilities & Equipment	50	44	60	59	52
9	Computer Assisted or Managed Instr.	51	59	71	70	66.5
9	Closed Circuit TV in Schools	52	46	75	78	66.5
10	Specialized Personnel	53	55	59	61	55
8	Learning Disabilities Teaching	54	53	48	35	48
10	Libraries and Instruction	55	50	62	60	54
10	Textbooks and Instruction	56	54	65	62	56
3	Follow-up of Graduates	57	65	66	63	66
10	Teaching Personnel	58	57	63	64	59
3	Pre-School Guidance Service	59	63	69	48	57.5
10	Audio-Visual Mat'l & Equipment	60	58	70	73	68
4	Prog. for Culturally Disadvantaged	61	67	78	77	75
2	Junior High School Education	62	71	56	55	61
2	Senior High School Education	63	70	55	57	62.5
2	Adult Education	64	72	58	54	64
7	Appliance & Small Motor Repair	65	56	52	47	53
2	Kindergarten Education	66	69	54	50	57.5
8	Special Education Teacher	67	61	36	27	44.5
10	Transportation	68	64	73	67	70
2	Post-Secondary Vocational Tech. Ed.	69	74	53	49	62.5
10	Building Maint. & Operation	70	60	74	69	71
2	Early Childhood	71	78	76	74	77
2	Intermediate Level Education	72	76	67	65	73
4	Prog. for Physically Handicapped	73	52	43	38	51
2	Primary Education	74	73	61	56	69
2	Junior College	75	75	68	58	72
2	College-University Education	76	77	77	71	78
10	Paraprofessional Personnel	77	68	64	72	74
10	Adm. & Supervisory Personnel	78	66	72	75	76
2	Infant Education	79	79	79	79	79

TABLE 6

RANKINGS OF STUDENTS, PARENTS, AND EDUCATORS FROM FULLY ACCREDITED AND  
NON-ACCREDITED DISTRICTS OF 11 EDUCATIONAL CATEGORIES

Cat- No.	Major Categories	3A NA Students	1A 2A Students	3A NA Parents	1A 2A Parents	3A NA Educators	1A 2A Educators	Composite Rank
1	Subject Fields Taught in School	4	6	5	5	8	8	6
2	Level of Education	10	11	9	9	10	10	11
3	Counseling and Psychological Services	1	2	3	2	2	4	2
4	Educational Programs for Stu- dents with Particular Needs	3	1	1	1	1	1	1
5	In-Service Instruction for Teachers Covering Various Topic Areas	11	10	11	11	6	6	10
6	Teacher Pers. & Prob. with Ob- taining & Retaining Teachers	7	7	6	8	9	11	7
7	Vocational-Technical Program	2	5	2	3	3	3	3
8	School Services for Pupils	6	4	4	4	4	2	4
9	Instr. Approaches used by Teach- ers with Students	5	3	7	6	5	5	5
10	Budget Allocations for Various Aspects of Education	9	8	10	10	7	7	8
11	Administrative Services	8	9	8	7	11	9	9

3.13



TABLE 7

RANKINGS OF STUDENTS, PARENTS, AND EDUCATORS FROM FULLY ACCREDITED AND  
NON-ACCREDITED DISTRICTS OF 79 EDUCATIONAL NEEDS

Cat. No.	Educational Needs	3A NA Students	1A 2A Students	3A NA Parents	1A 2A Parents	3A NA Educators	1A 2A Educators	Composite Rank
3	Personal Counseling	1	3	2	3	2	13	3
4	Program for Slow Learners	2	2	1	1	1	1	1
3	Educational-Voc. Guidance	3	5	4	4	7	20	5
4	Program for Alienated Youth	4	1	5	2	4	2	2
7	Skilled Trades	5	10	3	6	8	5	4
1	Foreign Languages	6	6	28	8	49	47	18
3	Junior High Guidance Service	7	9	11	7	19	19	8
4	Prog. for Academically Talented	8	13	33	25	3	3	9
7	Agricultural	9	33	14	39	15	29	15
4	Prog. for Students Terminating							
	Education with high school	10	16	10	5	6	6	6
7	Human Services	11	17	8	13	34	22	10
4	Prog. for Educ. Disadvantaged	12	20	19	21	37	42	20
3	Advisory Svs. to Teacher for							
	Student Problems	13	11	7	11	9	15	7
7	Business	14	40	6	12	30	41	17
7	Home Economics	15	64	9	19	17	37	23
1	Mathematics	16	43	12	22	57	54	36
7	Industrial	17	55	13	35	12	33	26
1	Practical Arts	18	44	17	15	55	53	34.5
7	Applied Arts	19	18	41	40	36	32	29
3	Group Counseling	20	15	25	47	31	50	31
1	Language Arts	21	30	22	24	42	48	30
6	Psychological Testing	22	26	35	41	22	36	28
7	Auto Shop	23	49	24	55	20	44	38.5
1	Science	24	32	18	20	52	64	37
1	Fine Arts	25	22	30	29	47	49	34.5
9	Individualized Instruc. Prog.	26	4	42	18	10	16	12
4	Program for Average Pupils	27	7	27	32	28	25	19
7	Electronics	28	14	26	26	33	35	24
9	Non-Graded Program	29	19	71	48	32	28	43.5

3.14

TABLE 7--Continued

Cat. No.	Educational Needs	3A NA Students	1A 2A Students	3A NA Parents	1A 2A Parents	3A NA Educators	1A 2A Educators	Composite Rank
8	Post Graduate Employ. Spec.	30	8	15	16	48	46	25
1	Social Studies	31	39	40	49	58	58	49
4	Prog. for Mental. Handicapped	32	38	21	14	23	9	14
9	Resource Persons for Use in the Classroom	33	27	46	30	25	31	32
9	Teacher Aides	34	25	47	27	16	10	21.5
1	Health & Phys. Education	35	46	32	37	60	56	48
8	Speech Therapist	36	36	16	23	11	14	13
8	School Psychologist	37	12	31	54	18	27	21.5
9	Audio-Visual Instruction	38	24	61	46	27	39	46
9	Team Teaching	39	28	59	36	29	26	41
9	Televised Educ. Programs	40	41	62	52	53	52	52
8	Academic Placement Spec.	41	21	23	45	54	43	43.5
8	Remedial Reading Spec.	42	31	20	10	5	4	11
4	Prog. for Emotion. Disturbed	43	34	25	9	14	12	16
8	School Health Nurse	44	29	37	17	35	17	27
3	External Sources of Referral for Children	45	37	38	43	26	30	42
8	Social Worker	46	26	50	38	40	34	45
9	Instruction for Home-bound Students	47	47	45	33	62	55	51
9	Closed Circuit TV in Schools	48	45	77	78	75	74	69
10	Class. Facilities & Equip.	49	42	53	59	39	18	47
10	Libraries & Instructional Center Facilities	50	52	52	61	38	23	50
3	Follow-Up of Graduates	51	66	74	63	72	70	68
4	Program for Phys. Handicapped	52	62	43	31	69	75	56
3	Elementary School Guidance Service	53	35	34	42	24	11	33
10	Textbooks & Instructional Supplies	54	53	57	65	45	40	55
9	Computer Assisted or Managed Instruction	55	54	73	73	76	76	71
10	Specialized Personnel	56	50	49	60	51	45	54
2	Kindergarten Education	57	69	44	53	59	57	57

3.15

TABLE 7--Continued

Cat. No.	Educational Needs	3A NA Students	1A 2A Students	3A NA Parents	1A 2A Parents	3A NA Educators	1A 2A Educators	Composite Rank
8	Learning Disabilities Teacher	58	48	36	44	21	8	38.5
10	Teaching Personnel	59	56	56	66	44	21	53
9	Programmed Instruction	60	51	69	69	41	51	59
2	Adult Education	61	71	58	54	63	63	65
2	Junior High School Education	62	67	48	58	64	61	61
2	Senior High School Education	63	68	51	56	66	68	66
10	Audio-Visual Materials and Equipment	64	57	67	70	50	38	60
7	Appliance and Small Motor Repair	65	59	63	50	43	60	58
2	Post-Secondary Vocational- Technical Education	66	72	55	51	61	59	62.5
10	Transportation	67	65	64	75	79	77	74
10	Building Maintenance and Operation	68	61	68	71	73	65	70
8	Special Education Teacher for Retarded	69	60	39	28	13	7	40
2	Primary Education	70	74	54	62	65	62	67
2	Intermediate Level Education	71	77	65	68	68	66	72
4	Program for Culturally Distinct	72	63	75	77	78	73	76
3	Pre-School Guidance Service	73	58	60	64	46	67	64
2	Junior College	74	76	72	57	70	72	73
2	Early Childhood	75	75	78	74	67	71	77
2	College-University Education	76	78	76	72	77	78	78
10	Administrative and Super- visory Personnel	77	70	70	76	71	69	75
10	Paraprofessional Personnel	78	73	66	67	56	24	62.5
2	Infant Education	79	79	79	79	74	79	79

Table 4 indicates that Categories (4), Educational Programs..., (3) Counseling and Psychological..., and (7) Vocational-Technical Programs were ranked 1, 2, 3 by all groups except rural parents who reversed the last two categories. The only category where students and parents differed considerably was (9), Instructional Approaches..., which students ranked fourth while urban parents ranked it sixth and rural parents ninth. There were no major differences between rural and urban respondents, as might be expected, since only school districts representing smaller towns were selected.

Table 5 presents the rankings of the four groups on the same 79 items shown in Table 2. As would be expected, the same differences in emphasis on certain items between seniors and their parents appeared as was shown in Table 2. Some rural-urban differences were noted. Those involving rank differences between rural and urban students of more than ten rankings included; program for average pupils (urban ranked 10, rural ranked 20), fine arts (16, 30), psychological testing (24, 14), audio-visual instruction (28, 39), social studies (29, 42), academic placement specialist (40, 28), and program for mentally handicapped (46, 22). Parent-ranked differences of more than ten rankings included; junior high school guidance (urban ranked 7, rural ranked 18), individualized instruction (20, 42), program for average pupils (21, 34), program for academically talented (22, 33), program for educationally disadvantaged (11, 29), applied arts (26, 51), agricultural (45, 14), school psychologist (39, 22), teacher aides (29, 44), speech therapist (28, 10), program for emotionally disturbed (10, 24), academically placement specialist (38, 26), remedial reading specialist (23, 7), school health nurse (32, 16), program for mentally handicapped (27, 15), home economics (25, 9), and special education teacher (36, 27).

Two comments appear obvious from these discrepancies; first, there is considerably more disagreement among parents than among students; secondly, while some overlap occurs, it appears that rural dwellers generally rank as more desirable than urban dwellers special programs for students while as more undesirable the employment of specialists in the several fields of reading, special education, psychology, etc

When grouping seniors, their parents, and educators by accreditation level of their schools, considerably more disagreement occurred. For example, in Table 6 it will be noted that no clear-cut agreement exists for which categories are ranked 1, 2, 3. Five categories were so ranked under this comparison while under the previous two comparisons only three categories were so ranked. But the composite rank of the categories found the same three categories ranked first as in previous comparisons.

Again, extreme disagreement was found among seniors, their parents, and educators similar to that reported in Tables 2 and 5, but the interest in this comparison is in the small school-large school differences. Considering the items for which a rank difference of ten or more positions occurred for those items ranked in the upper thirty for each group of students, 18 such item differences were found. Similarly, 17 such differences were found to occur between parent groups and 17 between educator groups.

Students from the smaller schools appeared to rank vocational programs higher while programs or specialists to meet individual needs were ranked lower than by students from larger schools. While the pattern was not as clear-cut, parents and educators also appeared to have the same small-large school discrepancies as did students

## CHAPTER IV

### STATEWIDE NEED ASSESSMENT RESULTS

The statewide need assessment was conducted during Fall, 1969. The major effort was placed on the student, parent, and educator responses. These were obtained, as described in Chapter II, from 54 school districts selected to represent several enrollment classifications of districts. These districts were selected from regions of the state as shown on the map in Appendix D. Responses from several other populations were also solicited; these included school board members, welfare recipients, retired people, school dropouts, migrants, and college graduates. The results obtained from analyzing the data will be presented under the following five headings:

Overall State Rankings of Educational Needs

Regional Rankings of Educational Needs

Rankings of Educational Needs by Several Variables

Rankings of Educational Needs by Other Populations

Instrument Reliability

#### Overall State Rankings of Educational Needs

Some responses were obtained from all 54 districts; the 46 randomly selected districts, and the 8 districts representing each region's primary city. In several cases it was noted that the student instruments were not administered in class as requested both by telephone when soliciting the superintendent's permission to include each district in the sample and in the direction letter mailed to the superintendent. Despite these administrative errors and normal

## 4.2

absenteeism, the return of nearly 2,700 instruments represents a response of approximately 90 per cent. Nearly one hundred returns were unuseable because the schools returned the answer sheets but not the instrument. Other forms were obviously incorrectly completed having multiple answers marked in a single answer space. Of the returns, 2,564 were useable; 1,367 8th graders and 1,197 12th graders.

Because of time pressures, it was not possible to follow-up the parent responses before the printing of this report. Also, the optional nature of the name and address questions on the student forms resulted in a very limited name list for parent follow-up purposes. A total of 850 parent responses were received. Based on the total number of student responses, this represents a 32 per cent return. Of these returns, 765 were useable - a 30 per cent return based on the number of useable student returns. It is anticipated that one follow-up attempt will be made early in 1970. The results of this follow-up, as they affect the parent results presented in this report, will be given in an addendum to this report.

Finally, it was requested that the educators also be given their forms in a group setting in order to insure a good return. Apparently, all but four districts did so resulting in 965 responses - a return of nearly 70 per cent based on the number of educators these districts reported employing as of the opening of school in 1969-70. If the districts from which responses were very limited are deleted, the proportion of returns increases to 73 per cent.

This section contains the following results; Table 8 presents the rankings of the ten categories by students, parents, and educators, Table 9 presents student, parent, and educator rankings of the 72 items ranked by all



respondents, and Table 10 presents the rankings of parents and educators including the additional two categories ranked only by adults.

TABLE 8  
RANKINGS OF STUDENTS, PARENTS, AND EDUCATORS  
OF 10 EDUCATIONAL CATEGORIES

Cat. No.	MAJOR CATEGORIES	12th Graders Rank N=1197	8th Graders Rank N=1367	Parents Rank N=731	Educa- tors Rank N=899	Comp. Rank
1	Academic Subject Fields	7	7	4	8	7
2	Level of Education	10	8	6	10	8
3	Counseling & Psychological Serv.	1	5	3	4	3
4	Educational Prog. for Students	2	1	1	1	1
5	Vocational-Technical Programs	3	4	2	3	2
6	School Services for Pupils	6	6	5	5	5
7	Instructional Approaches	5	3	9	7	6
8	More Money for Education	4	2	8	2	4
9	On-the-job Training for Teachers	9	9	10	6	8
10	Adm. Svs. and Teacher Personnel	8	10	7	9	8

For each population, students, parents, and educators, in this and future sections, the student results will be presented as representing elementary (8th grade) or secondary (12th grade). Further, the order of the items in Tables 9, 10, and all future tables, will be as ranked by 12th grade students. The rationale for selecting this group was the learner-oriented design of this need assessment; rankings based on learner responses were desirable. Also, 12th graders could be considered to most closely represent learner reactions to educational needs because of their proximity to the total K-12 educational program. Finally, only 72 of the 80 items contained under the eight categories to which all populations responded will be reported. The deleted eight items represent the open-ended response, "other," which was included as one of the ten responses to each category.

TABLE 9

RANKINGS OF STUDENTS, PARENTS, AND EDUCATORS  
OF 72 EDUCATIONAL NEEDS

Cat. No.	EDUCATIONAL NEEDS	12th Graders Rank	8th Graders Rank	Parents Rank	Educa- tors Rank	Comp. Rank
3	Personal Counseling	1	18	6	10	5
4	Program for Slow Learners	2	1	1	1	1
8	Better Classroom Facil. & Equip.	3	2	48	8	9
3	Educational-Vocational Guidance	4	47	8	11	11
4	Program for Alienated Youth	5	4	2	2	2
5	Skilled Trades	6	16	3	4	3
7	Individualized Instruction Prog.	7	25	44	27	21
8	More Specialized Personnel	8	14	50	29	20
3	Advisory Services to Teacher	9	32	12	13	10
8	Better Libraries & Instructional Facilities & Equipment	10	6	52	15	16
3	Junior H.S. Guidance Service	11	13	14	18	8
3	Group Counseling	12	33	42	48	30
5	Electronics	13	23	24	19	15
4	Program for Academically Talented	14	7	17	6	6
3	Psychological Testing	15	56	29	32	28
4	Program for Mentally Handicapped	16	3	5	7	4
4	Program for Average Pupils	17	8	7	22	7
5	Human Services	18	12	30	33	18
7	Instruc. for Students Home Bound	19	5	54	58	31
5	Business	20	26	9	23	14
4	Program for Students Terminating Education with High School	21	42	4	5	12
7	Resource Persons for Use in Class.	22	17	51	35	25
5	Applied Arts	23	22	64	44	42
7	Flexibility in Instruction	24	31	53	34	35
5	Agricultural	25	28	10	14	13
5	Auto Shop	26	46	19	17	22
8	Add'l Textbooks & Instruc. Supply	27	15	56	26	24
8	Teaching Personnel	28	51	57	3	32
7	Programmed Textbooks, Teach. Mach. and/or Computer Asst. Instruction	29	11	62	51	42
8	County or Regional Programs of Shared Services	30	29	47	21	27
6	Post-Grad. Employment Specialist	31	41	27	49	37
7	Team Teaching	32	24	60	40	45.5
5	Industrial	33	36	13	12	19
4	Program for Emotionally Disturbed	34	9	23	20	17
6	Academic Placement Specialist	35	37	26	43	33.5
7	Audio-Visual Instruction	36	35	63	46	50.5
7	Closed Circuit TV in School	37	10	70	63	50.5

Table 9--Continued

Cat No.	EDUCATIONAL NEEDS	12th Graders Rank	8th Graders Rank	Parents Rank	Educa- tors Rank	Comp. Rank
1	Foreign Languages	38	40	25	52	44
3	External Sources of Referral for Children with Problems	39	49	40	28	45.5
8	Add'l Audio-Visual Mat'l & Equip.	40	21	59	30	38
6	School Psychologist	41	44	36	31	39.5
1	Fine Arts	42	59	38	47	53
1	Practical Arts	43	50	15	45	42
4	Program for Physically Handicapped	44	19	35	65	48
6	Social Worker	45	34	43	37	47
1	Sec. School Voc-Tech. Programs	46	71	22	38	49
8	More Paraprofessional Personnel	47	27	58	9	33.5
5	Home Economics	48	38	21	39	36
1	Science	49	57	20	55	52
6	School Health Nurse	50	20	32	36	29
6	Special Education Teacher	51	30	16	25	23
3	Elemen. School Guidance Service	52	48	28	24	39.5
1	Health and Physical Education	53	53	49	57	58
6	Reading Specialist	54	45	11	16	26
1	Mathematics	55	58	18	56	54
1	Language Arts	56	69	31	42	56
7	Televised Educ. Prog. to Home	57	39	68	62	61
1	Social Studies	58	67	45	60	62
8	More Adm. and Supervisory Personnel	59	65	69	71	69
6	Speech Therapist	60	61	33	41	56
2	Kindergarten Education	61	52	34	53	57
2	Post-Sec. Voc-Tech. Education	62	66	37	54	59
6	Librarian and/or Audio-Vis. Spec.	63	55	67	50	65
2	Secondary Education	64	62	41	64	63
2	Adult Education	65	64	46	59	64
2	Elementary Education	66	54	39	61	60
4	Program for Culturally Distinct	67	43	65	70	66
2	Junior College	68	63	55	68	67
3	Pre-School Guidance Service	69	60	61	66	68
2	College-University Education	70	70	66	69	70
2	Early Childhood Education	71	68	71	67	71
2	Infant Education	72	72	72	72	72

TABLE 10

RANKINGS OF PARENTS AND EDUCATORS  
OF 90 EDUCATIONAL NEEDS

Cat. No.	EDUCATIONAL NEEDS	Parents Rank	Educators Rank	Composite Rank
4	Program for Slow Learners	1	1	1
4	Program for Alienated Youth	2	2	2
6	Skilled Trades	3	4	3
4	Program for Students Terminating Education with High School	4	5	4
4	Program for Mentally Handicapped	5	7	5
3	Personal Counseling	6	10	6
4	Program for Average Pupils	7	22	13
3	Educational-Vocational Guidance	8	11	7
6	Business	9	23	14.5
6	Agriculture	10	14	9
7	Reading Specialist	11	16	12
3	Advisory Services to Teacher for Student Problems	12	13	10.5
6	Industrial Arts	13	12	10.5
3	Junior High School Guidance Service	14	18	14.5
1	Practical Arts	15	51	26
7	Special Education Teacher	16	25	17
4	Program for Academically Talented	17	6	8
1	Mathematics	18	70	43.5
6	Auto Shop	19	17	16
1	Science	20	68	43.5
6	Home Economics	21	42	24
1	Secondary School Vocational Technical Prog.	22	40	22.5
4	Program for Emotionally Disturbed	23	20	18.5
6	Electronics	24	19	18.5
1	Foreign Languages	25	60	41.5
7	Academic Placement Specialist	26	48	34
7	Post-Graduation Employment Specialist	27	57	39.5
3	Elementary School Guidance Service	28	24	20
3	Psychological Testing	29	33	22.5
6	Human Services	30	34	25
1	Language Arts	31	47	37
7	School Health Nurse	32	38	29
7	Speech Therapist	33	44	36
2	Kindergarten Education	34	65	49
10	Better Methods of Supervising Teachers	35	77	59
4	Program for Physically Handicapped	36	81	62
7	School Psychologist	37	32	27.5
2	Post-Secondary Vocational-Technical Educ.	38	67	54.5
1	Fine Arts	39	55	47
2	Elementary Education	40	75	61

Table 10--Continued

Cat. No.	EDUCATIONAL NEEDS	Parents Rank	Educators Rank	Composite Rank
10	School-Community Relations	41	62	52
3	External Sources of Referral for Children with Problems	42	29	30.5
2	Secondary Education	43	80	65
3	Group Counseling	44	56	50
7	Social Worker	45	39	39.5
8	Individualized Instruction Programs	46	27	32.5
10	Regional Educational Centers	47	64	58
1	Social Studies	48	74	63.5
2	Adult Education	49	73	63.5
9	County or Regional Programs of Shared Serv.	50	21	30.5
9	Better Classroom Facilities and Equipment	51	8	21
10	Increased Numbers of Teacher Applicants	52	85	75
1	Health and Physical Education	53	71	66
5	Instruction in Developing Pupil Motivation	54	28	38
9	More Specialized Personnel	55	30	41.5
8	Resource Persons for Use in the Classroom	56	37	46
10	Better Incentives for Teacher Retention	57	49	57
9	Better Libraries and Instructional Center Facilities and Equipment	58	15	32.5
5	Instruction in Pupil Guidance	59	46	54.5
8	Flexibility in Instruction	60	35	48
8	Instruction for Students Home Bound by Illness	61	72	72
2	Junior College	62	84	80
10	Teacher Utilization and Specialization	63	66	69
5	Instruction in Teaching Children with Learning Disabilities	64	41	54.5
9	Additional Textbooks and Instructional Supply	65	26	45
9	Teaching Personnel	66	3	27.5
9	More Paraprofessional Personnel	67	9	35
10	Educational Research	68	76	79
5	Instruction in Individualizing the Learning Process	69	36	54.5
9	Additional Audio-Visual Mat'l & Equipment	70	31	51
8	Team Teaching	71	43	60
10	Teacher Involvement in Teacher-School Negotiations	72	61	72
3	Pre-School Guidance Service	73	82	82
8	Programmed Textbooks, Teaching Machines and/or Computer Assisted Instruction	74	59	72
5	Instruction in Subject Matter Area Taught by Teacher	75	63	76
8	Audio-Visual Instruction	76	54	70
6	Applied Arts	77	50	68
4	Program for Culturally Distinct	78	87	84.5
2	College-University Education	79	86	84.5

Table 10--Continued

Cat. No.	EDUCATIONAL NEEDS	Parents Rank	Educators Rank	Composite Rank
5	Instruction in Curriculum Development	80	45	67
7	Librarian and/or Audio-Visual Specialist	81	58	77.5
5	Instruction in Selection and Use of Audio- Visual Materials and Equipment	82	52	74
5	Instruction in Understanding Research and Testing	83	69	81
8	Televised Education Programs to Your Home	84	78	83
9	More Administrative and Supervisory Personnel	85	89	88
5	Instruction in Using Team Teaching	86	53	77.5
10	Data Processing for School Management	87	88	89
8	Closed Circuit TV in School	88	79	86
2	Early Childhood Education	89	83	87
2	Infant Education	90	90	90

Review of the rankings in Table 8 indicates that the four populations agree on only one category, 3,<sup>a</sup> counseling and psychological services, ranked as most important. For example, three different categories were ranked "two," and the category receiving the composite rank of "two," 7, school services for pupils, was ranked "three" by both 12th graders and educators, and "four" by 8th graders. Similar inconsistencies are apparent in the rankings of the other categories.

These inconsistencies were carried over to the item rankings shown in Tables 9 and 10 through the medium of the adjusted item means. Only two items, 2,<sup>b</sup> program for slow learners, and 5, program for alienated youth, were ranked in the first ten by all four populations, as shown in Table 9. But when considering the items ranked in the first twenty-five by the four populations and

<sup>a</sup>Category number as shown in Table 8.

<sup>b</sup>Item number, using the rank given each item by 12th graders as shown in Table 9 as the item numbers.

ignoring inconsistencies (i.e., such as the item ranked first by 12th graders, personal counseling, being ranked 18th by 8th graders), the following evidence of agreement in the rankings can be shown. When comparing the number of items ranked in the first twenty-five by the other three populations with the 12th graders, there were found to be seventeen by the 8th graders, fourteen by the parents, and sixteen by the educators. Even more revealing of the overall agreement among all populations, even if not between any two populations, is that twenty of the first twenty-five items, as ranked by the 12th graders received composite rankings within the first twenty-five items.

Considering Table 10, which contains the rankings of parents and educators, including the two categories, 5, on-the-job training for teachers, and 10, administrative services and teacher personnel, completed only by adults, it will be noted that the highest ranked item from these two categories was instruction in developing pupil motivation which was ranked 28th by educators, but 54th by parents for a composite ranking of 38th. Again, consistent with the pilot assessment, it is significant that the items in these two categories, which reflect administrative or organizational needs with which learners are not usually familiar, were not ranked in the upper third of the items. Thus, the items in these two categories appear to require little consideration when identifying the items ranked in the top third.

#### Regional Rankings of Educational Needs

As one phase of the assessment of critical educational needs, the state was required by the United States Office of Education to identify regional differences in critical needs. This section presents the rankings of students, parents, and educators from each of the eight regions into which the state was

#### 4.10

divided according to the map presented in the 1970 State Plan for Title III and attached to this report as Appendix D.

Rather than present the entire list of items, only the first twenty-five items selected on the basis of the composite rankings reported in Table 9 are presented. Table 11 presents the regional rankings for the ten categories while rankings of the twenty-five items for each region, by students, parents, and educators, are shown in Table 12. Further, in Table 12 there will be found for each region the items ranked by one or more populations within the first twenty-five regionally ranked items. Rankings identified by an asterisk indicate those items for each population which differ by fifteen or more rank positions from the statewide results given in Table 9. Those items identified with an x indicate items which differ by eleven through fourteen rank positions.

Considering the data shown in Table 11, for regions one and six very few differences between the regional and the statewide rankings were found; there being only ten and four times, respectively, where the difference was two rank positions. For region two there were only seven times when differences of two rank positions occurred, but 8th graders ranked 1, subject fields, three positions less important compared to the statewide results. For regions four, seven, and eight, there were also few differences of two or more positions, 6, 7, and 6 respectively, but there were also the following differences of three or more rankings:

<u>Region</u>	<u>Population</u>	<u>Educational Category</u>	<u>Regional</u>	
			<u>State</u>	<u>Regional</u>
4	12th graders	Instructional approaches	4	1
	8th graders	Counseling and psychological services	5	2
	Educators	Vocational-technical programs	5	9
7	8th graders	Counseling and psychological services	5	9
8	Parents	Level of education	7	10



TABLE 11

RANKINGS BY REGIONS OF STUDENTS, PARENTS, AND EDUCATORS  
OF 10 EDUCATIONAL CATEGORIES

Region 1

Cat. No.	MAJOR CATEGORIES	12th Graders Rank N=105	8th Graders Rank N= 89	Parents Rank N= 82	Educa- tors Rank N= 88
1	Academic Subject Fields	5	8	6	8
2	Level of Education	9	9	4	10
3	Counseling & Psychological Svs.	1	3	2	2
4	Educational Prog. for Students	2	1	1	1
5	Vocational-Technical Programs	3	4	3	4
6	School Services for Pupils	7	5	5	6
7	Instructional Approaches	4	6	10	9
8	More Money for Education	6	2	9	3
9	On-the-job Training for Teachers	10	7	8	5
10	Adm. Svs. and Teacher Personnel	8	10	7	7

Region 2

		N= 63	N=130	N= 66	N= 50
1	Academic Subject Fields	6	4	5	9
2	Level of Education	10	7	7	10
3	Counseling & Psychological Svs.	1	6	2	2
4	Educational Prog. for Students	4	1	1	1
5	Vocational-Technical Programs	2	5	3	4
6	School Services for Pupils	7	8	4	8
7	Instructional Approaches	5	2	8	5
8	More Money for Education	3	3	10	3
9	On-the-job Training for Teachers	9	9	9	6
10	Adm. Svs. and Teacher Personnel	8	10	6	7

Region 3

		N=186	N=217	N=130	N=132
1	Academic Subject Fields	7	7	5	8
2	Level of Education	10	8	8	9
3	Counseling & Psychological Svs.	4	6	4	5
4	Educational Prog. for Students	5	1	1	1
5	Vocational-Technical Programs	2	2	2	2
6	School Services for Pupils	6	5	3	3
7	Instructional Approaches	1	3	6	7
8	More Money for Education	3	4	7	4
9	On-the-job Training for Teachers	9	10	10	6
10	Adm. Svs. and Teacher Personnel	8	9	9	10

Table 11--Continued

Region 4

Cat. No.	MAJOR CATEGORIES	12th Graders Rank N=178	8th Graders Rank N=231	Parents Rank N= 84	Educa- tors Rank N=182
1	Academic Subject Fields	6	7	5	7
2	Level of Education	10	9	6	10
3	Counseling & Psychological Svs.	2	2	3	4
4	Educational Prog. for Students	3	1	1	2
5	Vocational-Technical Programs	4	5	2	3
6	School Services for Pupils	8	6	4	9
7	Instructional Approaches	5	4	7	5
8	More Money for Education	1	3	9	1
9	On-the-job Training for Teachers	9	8	10	6
10	Adm. Svs. and Teacher Personnel	7	10	8	8

Region 5

		N= 80	N= 73	N= 54	N= 96
1	Academic Subject Fields	4	8	3	6
2	Level of Education	7	4	7	9
3	Counseling & Psychological Svs.	2	2	4	3
4	Educational Prog. for Students	3	1	1	1
5	Vocational-Technical Programs	1	3	2	2
6	School Services for Pupils	8	5	5	5
7	Instructional Approaches	5	7	10	7
8	More Money for Education	6	6	9	4
9	On-the-job Training for Teachers	10	9	6	8
10	Adm. Svs. and Teacher Personnel	9	10	8	10

Region 6

		N=155	N=209	N= 90	N=110
1	Academic Subject Fields	9	7	4	9
2	Level of Education	10	8	8	10
3	Counseling & Psychological Svs.	1	6	3	4
4	Educational Prog. for Students	3	1	1	1
5	Vocational-Technical Programs	2	5	2	3
6	School Services for Pupils	5	4	5	5
7	Instructional Approaches	6	3	9	6
8	More Money for Education	4	2	6	2
9	On-the-job Training for Teachers	8	10	10	7
10	Adm. Svs. and Teacher Personnel	7	9	7	8

Table 11--ContinuedRegion 7

Cat. No.	MAJOR CATEGORIES	12th	8th	Parents	Educa-
		Graders Rank N=171	Graders Rank N=183	Rank N=114	tors Rank N= 92
1	Academic Subject Fields	9	7	3	8
2	Level of Education	10	6	6	9
3	Counseling & Psychological Svs.	3	9	4	5
4	Educational Prog. for Students	1	1	1	1
5	Vocational-Technical Programs	5	5	2	2
6	School Services for Pupils	6	4	5	4
7	Instructional Approaches	4	3	10	6
8	More Money for Education	2	2	8	3
9	On-the-job Training for Teachers	8	10	9	7
10	Adm. Svs. and Teacher Personnel	7	8	7	10

Region 8

		N=259	N=242	N=111	N=144
1	Academic Subject Fields	6	7	4	6
2	Level of Education	10	10	10	10
3	Counseling & Psychological Svs.	1	5	3	4
4	Educational Prog. for Students	3	1	1	1
5	Vocational-Technical Programs	2	4	2	3
6	School Services for Pupils	7	6	5	5
7	Instructional Approaches	5	3	9	7
8	More Money for Education	4	2	6	2
9	On-the-job Training for Teachers	9	8	8	8
10	Adm. Svs. and Teacher Personnel	8	9	7	9

TABLE 12

RANKINGS BY REGIONS OF STUDENTS, PARENTS, AND EDUCATORS  
OF THE OVERALL HIGHEST RANKED EDUCATIONAL NEEDS

Region 1

Cat. No.	EDUCATIONAL NEEDS	12th Graders Overall Rank	12th Graders Region- al Rank	8th Graders Rank	Par- ents Rank	Educa- tors Rank	
3	Personal Counseling	1	2	18	9	9	
4	Program for Slow Learners	2	1	1	1	2	
8	Better Classroom Facil. & Equip.	3	28 *	3	56	15	
3	Educational-Vocational Guidance	4	6	16 *	7	17	
4	Program for Alienated Youth	5	5	5	2	3	
5	Skilled Trades	6	12	10	4	6	
7	Individualized Instruction Prog.	7	11	40 *	43	37	
8	More Specialized Personnel	8	17	14	47	16	x
3	Advisory Services to Teacher	9	15	22	6	8	
8	Better Libraries & Instructional Facilities and Equipment	10	34 *	4	50	29	x
3	Junior H.S. Guidance Service	11	3	6	8	4	x
3	Group Counseling	12	7	15 *	44	35	x
5	Electronics	13	43 *	35 x	21	30	x
4	Program for Academically Talented	14	56 *	11	34 *	7	
3	Psychological Testing	15	9	37 *	17 x	21	x
4	Program for Mentally Handicapped	16	4 x	2	3	11	
4	Program for Average Pupils	17	30 x	9	24 *	23	
5	Human Services	18	18	20	30	19	x
7	Instruc. for Students Home Bound	19	19	13	59	60	
5	Business	20	44 *	21	12	34	x
4	Program for Students Terminating Education with High School	21	14	51	5	14	
7	Resource Persons for Use in Class.	22	21	26	51	40	
5	Applied Arts	23	25	27	46 *	45	
7	Flexibility in Instruction	24	16	52 *	49	42	
5	Agriculture	25	13 x	44 *	13	22	
5	Auto Shop	26			18		
8	Add'l Textbooks & Instruc. Supply	27		17		20	
8	Teaching Personnel	28				1	
8	County or Regional Programs of Shared Services	30	22			12	
5	Industrial	33			14	18	
4	Program for Emotionally Disturbed	34	8	8	10	10	
6	Academic Placement Specialist	35		19			
7	Closed Circuit TV in School	37		23			

Table 12--Continued

Cat. No.	EDUCATIONAL NEEDS	12th Graders Overall Rank	12th Graders Region- al Rank	8th Graders Rank	Par- ents Rank	Educa- tors Rank
8	Add'l Audio-Visual Mat'l & Equip.	40		25		
6	School Psychologist	41				25
1	Practical Arts	43	20		25	
4	Program for Physically Handicapped	44	10	7		
1	Sec. School Voc-Tech. Programs	46	24			
8	More Paraprofessional Personnel	47				13
5	Home Economics	48			23	
1	Science	49	23			
6	School Health Nurse	50		12		
6	Special Education Teacher	51			22	
3	Elementary School Guidance Service	52			15	5
6	Reading Specialist	54		24	19	24
2	Kindergarten Education	61			11	
2	Post-Sec. Voc-Tech. Education	62			16	
2	Adult Education	65			20	

Region 2

3	Personal Counseling	1	1	42	*	6	3		
4	Program for Slow Learners	2	3	1		1	1		
8	Better Classroom Facil. & Equip.	3	5	2		68	*	11	
3	Educational-Vocational Guidance	4	4	45		7		6	
4	Program for Alienated Youth	5	21	*	14	5		2	
5	Skilled Trades	6	10	39	*	8		8	
7	Individualized Instruction Prog.	7	24	*	25	44		16	x
8	More Specialized Personnel	8	11	27	x	61	x	29	
3	Advisory Services to Teacher	9	15	29		11		15	
8	Better Libraries & Instructional Facilities and Equipment	10	7	9		62		13	
3	Junior H.S. Guidance Service	11	6	24	x	20		12	
3	Group Counseling	12	2	28		41		43	
5	Electronics	13	12	50	*	40	*	24	
4	Program for Academically Talented	14	13	7		17		7	
3	Psychological Testing	15	18	54		50	*	22	
4	Program for Mentally Handicapped	16	26	3		3		10	
4	Program for Average Pupils	17	9	6		4		23	
5	Human Services	18	14	11		27		36	
7	Instruc. for Students Home Bound	19	31	x	4	48		42	*
5	Business	20	8	x	36	10		26	
4	Program for Students Terminating Education with High School	21	23	37		2		5	
7	Resource Persons for Use in Class.	22	29	17		52		17	x

Table 12--Continued

Cat. No.	EDUCATIONAL NEEDS	12th Graders Overall Rank	12th Graders Region- al Rank	8th Graders Rank	Par- ents Rank	Educa- tors Rank	
5	Applied Arts	23	19	23	64	53	*
7	Flexibility in Instruction	24	39 *	15 *	51	27	
5	Agriculture	25	28	34	9	18	
5	Auto Shop	26	17				
8	Add'l Textbooks & Instruc. Supply	27	22	13		21	
8	Teaching Personnel	28				4	
7	Programmed Textbooks, Teach. Mach. and/or Computer Asst. Instruction	29		12			
8	County or Regional Programs of Shared Services	30	20			20	
6	Post-Grad. Employment Specialist	31			18		
7	Team Teaching	32		18			
5	Industrial	33			19		
4	Prog. for Emotionally Disturbed	34			24		
7	Closed Circuit TV in School	37		5			
1	Foreign Languages	38		8			
3	External Sources of Referral for Children with Problems	39	16				
8	Add'l Audio-Visual Mat'l & Equip.	40		19			
1	Practical Arts	43	25	10	12		
1	Sec. School Voc-Tech. Programs	46			25		
8	More Paraprofessional Personnel	47				14	
5	Home Economics	48		21	16		
1	Science	49			15		
6	Special Education Teacher	51			14	25	
3	Elementary School Guid. Service	52				19	
1	Health & Physical Education	53		22			
6	Reading Specialist	54			13		
1	Mathematics	55		20	21		
7	Televised Educ. Prog. to Home	57		16			
6	Speech Therapist	60			22		
2	Elementary Education	66			23		

Region 3

3	Personal Counseling	1	4	31	x	8	15
4	Program for Slow Learners	2	8	1		1	1
8	Better Classroom Facil. & Equip.	3	2	3		37	x 13
3	Educational-Vocational Guidance	4	9	38		10	25 x
4	Program for Alienated Youth	5	5	2		2	3
5	Skilled Trades	6	3	7		4	5
7	Individualized Instruction Prog.	7	1	37	x	25	* 27

Table 12--Continued

Cat. No.	EDUCATIONAL NEEDS	12th Graders Overall Rank	12th Graders Region- al Rank	8th Graders Rank	Par- ents Rank	Educa- tors Rank
8	More Specialized Personnel	8	14	22	47	32
3	Advisory Services to Teacher	9	12	44	x 12	22
8	Better Libraries & Instructional Facilities and Equipment	10	17	11	61	26 x
3	Junior H.S. Guidance Service	11	20	33	* 18	23
3	Group Counseling	12	30	49	* 49	43
5	Electronics	13	10	8	* 28	9
4	Program for Academically Talented	14	21	12	16	4
3	Psychological Testing	15	23	55	22	35
4	Program for Mentally Handicapped	16	36 *	4	5	5
4	Program for Average Pupils	17	24	6	7	16
5	Human Services	18	19	5	19	x 29
7	Instruc. for Students Home Bound	19	7 x	9	44	58
5	Business	20	22	21	14	21
4	Program for Students Terminating Education with High School	21	32 x	32	3	8
7	Resource Persons for Use in Class.	22	13	17	42	33
5	Applied Arts	23	35 x	13	68	48
7	Flexibility in Instruction	24	15	29	39	x 30
5	Agriculture	25	25	20	11	18
5	Auto Shop	26		23	20	17
8	Teaching Personnel	28				7
7	Programmed Textbooks, Teach. Mach. and/or Computer Asst. Instruction	29	6	10		
6	Post-Grad. Employment Specialist	31			24	
7	Team Teaching	32	16			
5	Industrial	33				14
4	Program for Emotionally Disturbed	34		19	13	
6	Academic Placement Specialist	35		25	21	
7	Audio-Visual Instruction	36	11	14		
7	Closed Circuit TV in School	37	18	15		
8	Add'l Audio-Visual Mat'l & Equip.	40		16		
6	School Psychologist	41				10
1	Practical Arts	43			17	
4	Program for Physically Handicapped	44		18	15	
6	Social Worker	45				20
8	More Paraprofessional Personnel	47				11
5	Home Economics	48		24		
6	Special Education Teacher	51			9	12
3	Elemen. School Guidance Service	52				24
6	Reading Specialist	54			6	2
6	Speech Therapist	60			23	19

Table 12--Continued

		<u>Region 4</u>				
Cat. No.	EDUCATIONAL NEEDS	12th Graders Overall Rank	12th Graders Region- al Rank	8th Graders Rank	Par- ents Rank	Educa- tors Rank
3	Personal Counseling	1	2	6 x	10	12
4	Program for Slow Learners	2	4	1	1	2
8	Better Classroom Facil. & Equip.	3	1	3	50	4
3	Educational-Vocational Guidance	4	3	21 *	19 x	10
4	Program for Alienated Youth	5	6	4	5	3
5	Skilled Trades	6	11	22	3	5
7	Individualized Instruction Prog.	7	10	26	40	13 x
8	More Specialized Personnel	8	5	9	55	19
3	Advisory Services to Teacher	9	12	10 *	16	15
8	Better Libraries & Instructional Facilities and Equipment	10	7	7	56	9
3	Junior H.S. Guidance Service	11	9	5	9	21
3	Group Counseling	12	27 *	12 *	33	47
5	Electronics	13	20	23	31	16
4	Program for Academically Talented	14	13	14	13	7
3	Psychological Testing	15	15	34 *	37	30
4	Program for Mentally Handicapped	16	31 *	2	2	20
4	Program for Average Pupils	17	18	8	4	35 x
5	Human Services	18	29 x	19	22	31
7	Instruc. for Students Home Bound	19	22	11	45	51
5	Business	20	17	31	7	17
4	Program for Students Terminating Education with High School	21	21	49	15 x	8
7	Resource Persons for Use in Class.	22	30	24	46	26
5	Applied Arts	23	19	27	67	43
7	Flexibility in Instruction	24	23	45 x	51	18
5	Agriculture	25	38 x	32	8	23
5	Auto Shop	26				22
8	Add'l Textbooks & Instruc. Supply	27	14	17		14
8	Teaching Personnel	28	8			1
7	Programmed Textbooks, Teach. Mach. and/or Computer Aided Instruction	29		18		
8	County or Regional Programs of Shared Services	30				24
6	Post-Grad. Employment Specialist	31			21	
7	Team Teaching	32		25		
5	Industrial	33			6	11
4	Program for Emotionally Disturbed	34		13		25
7	Closed Circuit TV in School	37		15		
1	Foreign Languages	38	16			



Table 12--Continued

Cat. No.	EDUCATIONAL NEEDS	12th Graders Overall Rank	12th Graders Region- al Rank	8th Graders Rank	Par- ents Rank	Educa- tors Rank
6	School Psychologist	41			23	
1	Practical Arts	43	24		12	
4	Program for Physically Handicapped	44		16		
1	Sec. School Voc. Tech. Programs	46			24	
8	More Paraprofessional Personnel	47				6
5	Home Economics	48			11	
1	Science	49	25		18	
6	Special Education Teacher	51			21	
3	Elementary School Guid. Service	52		20	25	
6	Reading Specialist	54			14	
1	Mathematics	55			17	

Region 5

3	Personal Counseling	1	2	5	x	7	9
4	Program for Slow Learners	2	1	1		1	3
8	Better Classroom Facil. & Equip.	3	20	*	20	*	53
3	Educational-Vocational Guidance	4	3	9	*	5	19
4	Program for Alienated Youth	5	6	6		6	2
5	Skilled Trades	6	5	7		4	1
7	Individualized Instruction Prog.	7	17	48	*	50	37
8	More Specialized Personnel	8	32	x	32	*	49
3	Advisory Services to Teacher	9	16	18	x	22	10
8	Better Libraries & Instructional Facilities and Equipment	10	24	x	35	*	48
3	Junior H.S. Guidance Service	11	27	*	3		9
3	Group Counseling	12	9	38		47	47
5	Electronics	13	10	30		21	20
4	Program for Academically Talented	14	22	15		24	16
3	Psychological Testing	15	38	x	22	*	28
4	Program for Mentally Handicapped	16	44	*	2		11
4	Program for Average Pupils	17	35	*	4		3
5	Human Services	18	25	24	x	33	26
7	Instruc. for Students Home Bound	19	26	26	*	55	64
5	Business	20	4	*	13	x	8
4	Program for Students Terminating Education with High School	21	13	16	*	2	4
7	Resource Persons for Use in Class.	22	30	42	*	56	46
5	Applied Arts	23	29	10	x	67	38
7	Flexibility in Instruction	24	31	57	*	58	43
5	Agriculture	25	11	x	23	30	*

Table 12--Continued

Cat. No.	EDUCATIONAL NEEDS	12th Graders Overall Rank	12th Graders Region- al Rank	8th Graders Rank	Par- ents Rank	Educa- tors Rank
5	Auto Shop	26	12		19	11
8	Teaching Personnel	28				5
7	Programmed Textbooks, Teach. Mach. and/or Computer Asst. Instruction	29	21			
7	Team Teaching	32	19			
5	Industrial	33	14		14	6
4	Program for Emotionally Disturbed	34		11	17	21
1	Foreign Languages	38	7		18	
3	External Sources of Referral for Children with Problems	39		8		
1	Fine Arts	42	8			
1	Practical Arts	43	23		20	
4	Program for Physically Handicapped	44		17		
1	Sec. School Voc. Tech. Programs	46	15		10	
8	More Paraprofessional Personnel	47				13
5	Home Economics	48		25	15	
1	Science	49	18		25	
6	Special Education Teacher	51			16	14
3	Elementary School Guidance Svs.	52		21		25
6	Reading Specialist	54			12	8
1	Mathematics	55			13	
2	Kindergarten Education	61		12		
2	Elementary Education	66		19		
4	Program for Culturally Distinct	67			23	
3	Pre-School Guidance Service	69		14		

Region 6

3	Personal Counseling	1	1	25	6	11
4	Program for Slow Learners	2	2	1	1	1
8	Better Classroom Facil. & Equip.	3	7	2	50	8
3	Educational-Vocational Guidance	4	3	70	*	8
4	Program for Alienated Youth	5	4	4	5	2
5	Skilled Trades	6	11	36	*	3
7	Individualized Instruction Prog.	7	29	*	22	45
8	More Specialized Personnel	8	16	13	34	*
3	Advisory Services to Teacher	9	5	37	12	12
8	Better Libraries & Instructional Facilities and Equipment	10	12	7	51	9
3	Junior H.S. Guidance Service	11	17	21	20	24
3	Group Counseling	12	20	44	x	43
5	Electronics	13	6	31	21	23

Table 12--Continued

Cat. No.	EDUCATIONAL NEEDS	12th Graders Overall Rank	12th Graders Region- al Rank	8th Graders Rank	Par- ents Rank	Educa- tors Rank
4	Program for Academically Talented	14	10	6	22	6
3	Psychological Testing	15	23	64	32	44 x
4	Program for Mentally Handicapped	16	18	3	7	7
4	Program for Average Pupils	17	14	12	23	* 17
5	Human Services	18	15	20	31	37
7	Instruc. for Students Home Bound	19	35 *	5	62	49
5	Business	20	28	39 x	2	19
4	Program for Students Terminating Education with High School	21	25	58 *	4	10
7	Resource Persons for Use in Class.	22	31	32 *	54	35
5	Applied Arts	23	22	33 x	39	* 28 *
7	Flexibility in Instruction	24	26	27	55	34
5	Agriculture	25	24	35	25	* 25 x
5	Auto Shop	26	9		13	21
8	Add'l Textbooks & Instruc. Supply	27		10		
8	Teaching Personnel	28				3
7	Programmed Textbooks, Teach. Mach. and/or Computer Asst. Instruction	29		15		
8	County or Regional Programs of Shared Services	30		18		22
6	Post-Grad. Employment Specialist	31	8			
7	Team Teaching	32		23		
5	Industrial	33	19		9	13
4	Program for Emotionally Disturbed	34		8		15
6	Academic Placement Specialist	35			24	
7	Closed Circuit TV in School	37		9		
1	Foreign Languages	38			16	
3	External Sources of Referral for Children with Problems	39	13			14
8	Add'l Audio-Visual Mat'l & Equip.	40				20
6	School Psychologist	41	21			
1	Practical Arts	43			14	
4	Program for Physically Handicapped	44		19		
6	Social Worker	45		24		
1	Sec. School Voc. Tech. Programs	46			11	
8	More Paraprofessional Personnel	47		11		5
1	Science	49			17	
6	School Health Nurse	50		17		
6	Special Education Teacher	51		16	19	
6	Reading Specialist	54			10	16
1	Mathematics	55			18	
1	Language Arts	56			15	
7	Televised Educ. Prog. to Home	57		14		

Table 12--Continued

## Region 7

Cat. No.	EDUCATIONAL NEEDS	12th Graders Overall Rank	12th Graders Region- al Rank	8th Graders Rank	Par- ents Rank	Educa- tors Rank	
3	Personal Counseling	1	3	58	*	4	23 x
4	Program for Slow Learners	2	1	1		1	
8	Better Classroom Facil. & Equip.	3	5	3		46	7
3	Educational-Vocational Guidance	4	13	69	*	11	18
4	Program for Alienated Youth	5	2	7		3	11
5	Skilled Trades	6	15	20		2	3
7	Individualized Instruction Prog.	7	9	35		60	* 34
8	More Specialized Personnel	8	10	23		48	44 *
3	Advisory Services to Teacher	9	18	59	*	21	31
8	Better Libraries & Instructional Facilities and Equipment	10	6	9		51	22
3	Junior H.S. Guidance Service	11	33	*	51	*	17 38 *
3	Group Counseling	12	21		62	*	40 52
5	Electronics	13	29	*	25		24 25
4	Program for Academically Talented	14	20		6		9 2
3	Psychological Testing	15	30	*	70	x	35 36
4	Program for Mentally Handicapped	16	4	x	2		7 5
4	Program for Average Pupils	17	40	x	10		13 8 x
5	Human Services	18	27		16		33 42
7	Instruc. for Students Home Bound	19	23		8		55 68
5	Business	20	45	*	28		30 * 24
4	Program for Students Terminating Education with High School	21	17		39		8 15
7	Resource Persons for Use in Class.	22	14		12		57 37
5	Applied Arts	23	12	x	26		59 64 *
7	Flexibility in Instruction	24	32		29		63 39
5	Agriculture	25	41	*	19		5 6
5	Auto Shop	26				16	16
8	Add'l Textbooks & Instruc. Supply	27	11		18		17
8	Teaching Personnel	28	24				4
7	Programmed Textbooks, Teach. Mach. and/or Computer Asst. Instruction	29	19		14		
8	County or Regional Programs of Shared Services	30	7		15		10
6	Post-Grad. Employment Specialist	31	8		21		
7	Team Teaching	32			22		
5	Industrial	33	25			19	9
4	Program for Emotionally Disturbed	34	22		4	22	
6	Academic Placement Specialist	35	16		24		

Table 12--Continued

Cat. No.	EDUCATIONAL NEEDS	12th Graders Overall Rank	12th Graders Region- al Rank	8th Graders Rank	Par- ents Rank	Educa- tors Rank
7	Closed Circuit TV in School/	37		17		
8	Add'l Audio-Visual Mat'l & Equip.	40		13		
1	Practical Arts	43			6	
8	More Paraprofessional Personnel	47				14
5	Home Economics	48				21
1	Science	49			15	
6	School Health Nurse	50		5	20	18
6	Special Education Teacher	51		11	12	13
3	Elemen. School Guidance Service	52			18	
6	Reading Specialist	54				12
1	Mathematics	55			10	
1	Language Arts	56			14	
1	Social Studies	58			25	
2	Kindergarten Education	61			23	

Region 8

3	Personal Counseling	1	1	18	5	12
4	Program for Slow Learners	2	2	1	1	1
8	Better Classroom Facil. & Equip.	3	3	2	35 x	6
3	Educational-Vocational Guidance	4	4	60 x	7	10
4	Program for Alienated Youth	5	5	3	2	2
5	Skilled Trades	6	6	23	3	5
7	Individualized Instruction Prog.	7	14	10 *	43	20
8	More Specialized Personnel	8	8	8	40	40 x
3	Advisory Services to Teacher	9	7	43 x	14	16
8	Better Libraries & Instructional Facilities and Equipment	10	11	7	33 *	8
3	Junior H.S. Guidance Service	11	17	16	11	22
3	Group Counseling	12	10	31	45	65 *
5	Electronics	13	12	21	16	27
4	Program for Academically Talented	14	9	5	24	9
3	Psychological Testing	15	15	57	19	31
4	Program for Mentally Handicapped	16	25	4	12	7
4	Program for Average Pupils	17	18	12	6	23
5	Human Services	18	26	28 *	36	51 *
7	Instruc. for Students Home Bound	19	21	6	57	62
5	Business	20	20	25	18	19
4	Program for Students Terminating Education with High School	21	29	35	4	3
7	Resource Persons for Use in Class.	22	24	14	48	35
5	Applied Arts	23	22	26	60	52

Table 12--Continued

Cat. No.	EDUCATIONAL NEEDS	12th Graders Overall Rank	12th Graders Region- as Rank	8th Graders Rank	Par- ents Rank	Educa- tors Rank
7	Flexibility in Instruction	24	28	19 x	47	24
5	Agriculture	25	16	37	9	17
5	Auto Shop	26	13		13	15
8	Add'l Textbooks & Instruc. Supply	27	23	11		14
8	Teaching Personnel	28		24		4
7	Programmed Textbooks, Teach. Mach and/or Computer Asst. Instruction	29		13		
7	Team Teaching	32		20		
5	Industrial Arts	33	19	22	8	13
4	Program for Emotionally Disturbed	34		9		11
6	Academic Placement Specialist	35			25	
7	Closed Circuit TV in School	37		17		
1	Foreign Languages	38			10	
8	Add'l Audio-Visual Mat'l & Equip.	40				18
1	Practical Arts	43			15	
1	Sec. School Voc. Tech. Programs	46			22	
8	More Paraprofessional Personnel	47		15		
5	Home Economics	48			20	
1	Science	49			23	
6	Special Education Teacher	51			21	25
6	Reading Specialist	54			17	21

\*Denotes difference in rankings for this item of eleven through four-  
teen positions.

\*Denotes difference in rankings for this item of fifteen or more posi-  
tions. Differences are based on a comparison of the rankings for this item  
of the four populations.

Finally, the last two regions, three and five, reported the most inconsistencies  
compared to the statewide results. The following rank differences of three or  
more were found:

Region	Population	Educational Category	Regional	
			State	Regional
3	12th graders	Counseling and psychological services	1	4
	12th graders	School services for pupils	5	1
	12th graders	Educational programs	2	5
	Parents	School services for pupils	9	6

Region	Population	Educational Category	Regional	
			State	Regional
5	12th graders	Subject fields	7	4
	12th graders	Levels of education	10	7
	8th graders	Levels of education	8	4
	8th graders	Counseling and psychological services	5	2
	8th graders	School services for pupils	3	7
	8th graders	Instructional approaches	2	6
	Parents	More money for education	10	6

Continuing with consideration of the data shown in Table 12, those of the first twenty-five items as identified by 12th graders which differed in rankings between region and state by more than ten positions are marked. Regions four and eight had the fewest rank differences, 14 and 10 respectively, out of one-hundred possibilities. Regions one and five had the most rank differences exceeding ten; 27 and 28 respectively. A review of Table 12 indicated that for only the following items did rank differences of more than ten occur for three or more of the populations.

Region	12th Graders Overall Rank	Educational Need
1	13	Electronics
	15	Psychological testing
5	3	Better Classroom Facilities and Equipment
	10	Better Library and Instructional Center Facilities and Equipment
6	23	Applied Arts
7	11	Junior High School Guidance Services

#### Rankings of Educational Needs by Several Variables

Another phase of the assessment of critical educational needs identified in the 1970 State Plan was, "What rural-urban differences exist?" This question was raised not as the result of United States Office of Education requirements, but because of the realization that a rural state has problems neither common to, nor understood by, people from more urbanized regions.

In this section, an attempt will be made to determine whether or not the learners from the rural small schools have needs differing from learners in the more urban districts. This goal will be studied from the following three viewpoints:

1. Where students live--rural (farm or country) or urban (town).
2. Accreditation level of the districts--1A-2A or 3A-NA.
3. Level of secondary enrollment--less than one hundred, one to four hundred, or over four hundred.

The results obtained when ranking the responses of those students and parents living in town compared to on the farm or in the country are presented in the following two tables. Table 13 presents the rankings of respondents for the ten categories, while Table 14 does the same for the 72 items.

TABLE 13

RANKINGS OF RURAL VERSUS URBAN RESIDING STUDENTS AND PARENTS  
OF 10 EDUCATIONAL CATEGORIES

Cat. No.	MAJOR CATEGORIES	12th	12th	8th	8th	Parent	Parent
		Graders Rural N=560	Graders Urban N=598	Graders Rural N=600	Graders Urban N=720	Rural N=311	Urban N=271
1	Academic Subject Fields	7	7	7	7	5	4
2	Level of Education	10	10	8	8	7	8
3	Couns. & Psychological Svs.	2	1	5	5	3	3
4	Educ. Programs for Students	3	2	1	1	1	1
5	Vocational-Tech. Programs	1	5	3	4	2	2
6	School Services for Pupils	6	6	6	6	4	5
7	Instructional Approaches	5	4	4	3	10	9
8	More Money for Education	4	3	2	2	9	6
9	On-job Train. for Teachers	9	9	9	9	8	10
10	Adm. Svs. & Teacher Personnel	8	8	10	10	6	7



TABLE 14

# RANKINGS OF RURAL VERSUS URBAN RESIDING STUDENTS AND PARENTS OF 72 EDUCATIONAL NEEDS

Cat. No.	EDUCATIONAL NEEDS	12th		12th		8th		8th		Parents		Parents	
		Graders	Rank	Graders	Rank	Graders	Rank	Graders	Rank	Rank	Rank	Rank	Rank
		Rural		Urban		Rural		Urban		Rural		Urban	
3	Personal Counseling	1		1		14		20		7		6	
4	Program for Slow Learners	2		2		1		1		1		1	
8	Better Classroom Facil. & Equipment	3		3		3		2		49	x	36	x
3	Educational-Vocational Guidance	4		7		41		50		9		12	
4	Program for Alienated Youth	5		4		4		4		3		3	
5	Skilled Trades	6		10		15		16		2		2	
7	Individualized Instruction Programs	12		6		28		27		47		37	
8	More Specialized Personnel	13		5		11		15		50		45	
3	Advisory Services to Teacher	10		8		27		33		14		13	
8	Better Libraries & Instructional Facilities and Equipment	8		11		7		6		51		52	
3	Junior H. S. Guidance Service	16		9		16		12		20		11	
3	Group Counseling	14		13		26	x	38	x	36	*	57	*
5	Electronics	11		16		25		22		30		21	
4	Program for Academically Talented	9	x	23	x	5		10		15		10	
3	Psychological Testing	24	x	12	x	56		55		32	x	19	x
4	Program for Mentally Handicapped	23		15		2		3		10		4	
4	Program for Average Pupils	22		14		6		7		5		8	
5	Human Services	17		26		12		13		31		25	
7	Instruc. for Students Home Bound	20		19		8		5		54		49	
5	Business	25		25		37	x	24	x	11		7	
4	Program for Students Terminating Education with High School	26		18		46		41		4		5	
7	Resource Persons for Use in Classroom	19		24		19		14		52		48	
5	Applied Arts	32	*	17	*	22		23		56		63	
7	Flexibility in Instruction	27		20		36		29		53		54	
5	Agricultural	7	*	39	*	10	*	47	*	6	x	20	x
5	Auto Shop	15	*	35	*	32	*	54	*	18	*	29	*
8	Add'l Textbooks & Instruc. Supplies	30		21		13		17		57		55	

Table 14--Continued

Cat. No.	EDUCATIONAL NEEDS	12th		12th		8th		8th		Parents		Parents	
		Graders	Rank	Graders	Rank	Graders	Rank	Graders	Rank	Rank	Rank	Rank	Rank
		Rural		Urban		Rural		Urban		Rural		Urban	
8	Teaching Personnel	35		22		57		44		62		50	
7	Programmed Textbooks, Teach. Machines and/or Computer Assisted Instruction	28		29		17		11		60		62	
8	County or Regional Programs of Shared Services												
6	Post-Graduate Employment Specialist	21		31		29		28		48		43	
7	Team Teaching	29		27		44		37		23		26	
5	Industrial	31		30		31		25		61		61	
4	Program for Emotionally Disturbed	18	*	41	x	21	*	48	*	8	*	23	*
6	Academic Placement Specialist	33		28		9		9		34		15	
7	Audio-Visual Instruction	34		34		43		30		22		33	
7	Closed Circuit TV in School	36		33		35		31		64		60	
1	Foreign Languages	37		32		18		8		70		69	
3	External Sources of Referral for Children with Problems	40		36		39		42		24		24	
8	Additional Audio-Visual Mat'l & Equip.	39		40		51		45		55		31	
6	School Psychologist	38		42		24		18		63		58	
1	Fine Arts	42		37		48		40		40		39	
1	Practical Arts	47		38		58		62		39		32	
4	Program for Physically Handicapped	43		44		49		51		16		9	
6	Social Worker	46		45		20		21		41		35	
1	Secondary School Voc-Tech. Programs	49		46		33		34		42		44	
8	More Paraprofessional Personnel	45		48		68		70		21		27	
5	Home Economics	44		50		34		26		58		56	
1	Science	41		54		40		36		19		30	
6	School Health Nurse	51		43		61		52		25		18	
6	Special Education Teacher	50		49		23		19		26		40	
3	Elementary School Guidance Service	48		53		30		32		13		17	
1	Health and Physical Education	54		47		45		46		28		22	
6	Reading Specialist	53		52		54		56		46		53	
1	Mathematics	52		57		42		43		12		14	
1	Language Arts	55		51		65		57		17		16	
1	Language Arts	56		56		69		69		27		28	

Table 14--Continued

Cat No.	EDUCATIONAL NEEDS	12th	12th	8th	8th	Parents	Parents	Comp.
		Graders Rank	Graders Rank	Graders Rank	Graders Rank	Rank	Rank	Rank
		Rural	Urban	Rural	Urban	Rural	Urban	
7	Televised Educational Programs to Home	57	55	38	39	68	65	
1	Social Studies	60	58	67	67	43	46	
8	More Administrative and Supervisory Personnel	58	60	50	71	67	70	
6	Speech Therapist	59	61	60	59	29	42	
2	Kindergarten Education	62	59	52	53	33	34	
2	Post-Secondary Voc-Tech. Education	63	62	66	66	37	38	
6	Librarian and/or Audio-Visual Specialist	61	66	47	60	66	68	
2	Secondary Education	65	65	63	58	38	51	
2	Adult Education	66	63	64	63	44	47	
2	Elementary Education	67	64	59	49	35	41	
4	Program for Culturally Distinct	64	71	53	35	69	64	
2	Junior College	68	67	62	64	45	59	
3	Pre-School Guidance Service	69	70	55	61	59	67	
2	College-University Education	70	69	70	68	65	66	
2	Early Childhood Education	71	68	71	65	71	71	
2	Infant Education	72	72	72	72	75	73	

<sup>x</sup>Denotes difference in rankings for this item of eleven through fourteen positions.

\*Denotes difference in rankings for this item of fifteen or more positions.  
Differences are based on a comparison of the rankings for this item of respondents representing the several levels of the variable.

Only three differences in rankings of greater than one position occurred for the ten categories. These were 5, vocational-technical programs, which was ranked 1 by rural, and 5 by urban 12th graders; 8, more money for the various aspects of education, ranked 9 by rural, and 6 by urban parents; and 9, on-the-job training for teachers, ranked 8 by rural, and 10 by urban parents. Further, no difference of greater than one rank position existed between the rural-urban rankings and the overall statewide rankings.

Considering the need item rankings shown in Table 14, it is apparent that considerable agreement exists between the rural, urban, and statewide results. Those needs within the first twenty-five ranked items on the basis of composite score which differed between rural and urban respondents by eleven through fourteen positions are indicated by an x while an asterisk indicates items differing in ranks by fifteen or more. For the following three items, rural respondents from all three populations reported the items as more important than did urban respondents: 25, agriculture; 26, auto shop; and 33, industrial arts. Similar differences in both directions will be noted for other need items ranked lower than 25th, as shown in Table 9.

The results obtained ranking the responses of students, parents, and educators from 1A-2A and 3A-NA accredited districts are presented in two sets of tables. Tables 15 and 17 present the rankings of 1A-2A and 3A-NA respondents, respectively, for the ten categories; while Tables 16 and 18 do the same for the 72 items.

Actually, little difference was found between 1A-2A and 3A-NA responses compared to each other and to statewide results for students, parents, and educators. The only differences in rankings of three positions were 3, counseling and psychological services, which was ranked 6th by 1A-2A 8th graders and 3rd

TABLE 15

RANKINGS OF STUDENTS, PARENTS, AND EDUCATORS  
FROM 1A-2A ACCREDITED DISTRICTS OF 10 EDUCATIONAL CATEGORIES

Cat. No.	MAJOR CATEGORIES	12th	8th	Parents	Educators
		Graders Rank N=679	Graders Rank N=803	Rank N=341	Rank N=519
1	Academic Subject Fields	8	7	4	8
2	Level of Education	10	8	6	10
3	Couns. & Psychological Svs.	4	6	3	5
4	Educ. Programs for Students	1	1	1	1
5	Vocational-Tech. Programs	5	4	2	3
6	School Services for Pupils	6	5	5	4
7	Instructional Approaches	3	3	9	6
8	More Money for Education	2	2	7	2
9	On-job Train. for Teachers	9	9	10	7
10	Adm.Svs. & Teacher Personnel	7	10	8	9

TABLE 17

RANKINGS OF STUDENTS, PARENTS, AND EDUCATORS  
FROM 3A ACCREDITED AND NON-ACCREDITED DISTRICTS  
OF 10 EDUCATIONAL CATEGORIES

Cat. No.	MAJOR CATEGORIES	12th	8th	Parents	Educators
		Graders Rank N=518	Graders Rank N=562	Rank N=386	Rank N=375
1	Academic Subject Fields	6	7	4	7
2	Level of Education	10	8	7	10
3	Couns. & Psychological Svs.	1	3	3	2
4	Educ. Programs for Students	3	1	1	1
5	Vocational-Tech. Programs	2	4	2	3
6	School Services for Pupils	7	6	5	5
7	Instructional Approaches	5	5	10	8
8	More Money for Education	4	2	8	4
9	On-job Train. for Teachers	9	9	9	6
10	Adm. Svs. & Teacher Personnel	8	10	6	9

TABLE 16

RANKINGS OF STUDENTS, PARENTS, AND EDUCATORS  
FROM 1A - 2A ACCREDITED DISTRICTS OF 72 EDUCATIONAL NEEDS

Cat. No.	EDUCATIONAL NEEDS	12th Graders Rank	8th Graders Rank	Parents Rank	Educa- tors Rank
3	Personal Counseling	3	31 *	6	21 *
4	Program for Slow Learners	1	1	1	1
8	Better Classroom Facil. & Equip.	2	2	42	7
3	Educational-Vocational Guidance	11	47	8	24 *
4	Program for Alienated Youth	4	4	4	3
5	Skilled Trades	8	19	2	4
7	Individualized Instruction Prog.	5 *	18 *	35 x	16 *
8	More Specialized Personnel	6	12	47	29
3	Advisory Services to Teacher	10	42 *	10	25 x
8	Better Libraries & Instructional Facilities & Equipment	9	6	53	14
3	Junior H.S. Guidance Service	14	26 *	16	35 *
3	Group Counseling	27 *	44 *	56 *	50
5	Electronics	18	22	21	11 *
4	Program for Academically Talented	16	11	20	5
3	Psychological Testing	21	56	25	41 *
4	Program for Mentally Handicapped	7 *	3	3	9
4	Program for Average Pupils	23	9	7	22
5	Human Services	25	13	26	27
7	Instruc. for Students Home Bound	12 *	5	52	51 x
5	Business	35 *	24	9	19
4	Program for Students Terminating Education with High School	20	43	5	6
7	Resource Persons for Use in Class.	15 x	17	48	32
5	Applied Arts	29	21	63	38 *
7	Flexibility in Instruction	13 *	25 *	55	30
5	Agricultural	32 x	39 *	11	15
5	Auto Shop	36 *	48 *	19	20
8	Addl Textbooks & Instruc. Supply	24	15	58	18
8	Teaching Personnel	17	41	57	2
7	Programmed Textbooks, Teach. Mach. and/or Computer Asst. Instruction	26	8	66	43
8	County or Regional Programs of Shared Services	33	27	46	23
6	Post-Grad. Employment Specialist	22	37	30	47
7	Team Teaching	19	20	61	37
5	Industrial	42 *	45 *	17	12
4	Program for Emoc. ally Disturbed	28	10	13 *	13 x
6	Academic Placement Specialist	31	32	24	42
7	Audio-Visual Instruction	30	28	64	48
7	Closed Circuit TV in School	34	7	70	56

Table 16--Continued

Cat. No.	EDUCATIONAL NEEDS	12th Graders Rank	8th Graders Rank	Parents Rank	Educa- tors Rank
1	Foreign Languages	40	46	29	55
3	External Sources of Referral for Children with Problems	39	49	37	36
8	Add'l Audio-Visual Mat'l & Equip.	37	14	59	34
6	School Psychologist	38	38	41	26
1	Fine Arts	44	61	40	49
1	Practical Arts	48	50	14	46
4	Program for Physically Handicapped	41	16	33	61
6	Social Worker	43	36	44	31
1	Sec. School Voc-Tech. Programs	51	70	27	40
8	More Paraprofessional Personnel	45	30	54	8
5	Home Economics	57	33	38	45
1	Science	49	52	23	59
6	School Health Nurse	46	23	34	33
6	Special Education Teacher	47	29	15	17
3	Elemen. School Guidance Service	50	51	22	28
1	Health and Physical Education	54	57	51	58
6	Reading Specialist	52	40	12	10
1	Mathematics	56	59	18	63
1	Language Arts	55	68	31	44
7	Televised Educ. Prog. to Home	53	35	67	54
1	Social Studies	58	69	49	53
8	More Adm. and Supervisory Personnel	59	67	68	72
6	Speech Therapist	60	55	36	39
2	Kindergarten Education	61	58	28	60
2	Post-Sec. Voc-Tech. Education	62	65	32	57
6	Librarian and/or Audio-Vis. Spec.	64	54	69	52
2	Secondary Education	66	60	45	66
2	Adult Education	65	62	43	62
2	Elementary Education	63	53	39	64
4	Program for Culturally Distinct	67	34	62	69
2	Junior College	68	63	50	68
3	Pre-School Guidance Service	71	64	60	65
2	College-University Education	70	71	65	70
2	Early Childhood Education	69	66	71	67
2	Infant Education	72	72	72	71

\*Denotes difference in rankings for this item of eleven through fourteen positions.

\*Denotes difference in rankings for this item of fifteen or more positions. Differences are based on a comparison of the rankings for this item of respondents representing the several levels of the variable.

TABLE 18

RANKINGS OF STUDENTS, PARENTS, AND EDUCATORS  
FROM 3A ACCREDITED AND NON-ACCREDITED DISTRICTS  
OF 72 EDUCATIONAL NEEDS

Cat. No.	EDUCATIONAL NEEDS	12th Graders Rank	8th Graders Rank	Parents Rank	Educa- tors Rank
3	Personal Counseling	1	9 *	5	4 *
4	Program for Slow Learners	3	1	1	1
8	Better Classroom Facil. & Equip.	4	3	51	14
3	Educational-Vocational Guidance	2	48	6	6 *
4	Program for Alienated Youth	7	4	2	2
5	Skilled Trades	5	14	3	3
7	Individualized Instruction Prog.	23 *	47 *	46 x	32 *
8	More Specialized Personnel	14	19	53	29
3	Advisory Services to Teacher	8	15 *	14	11 x
8	Better Libraries & Instructional Facilities & Equipment	11	8	49	18
3	Junior H.S. Guidance Service	10	6 *	12	10 *
3	Group Counseling	6 *	17 *	37 *	47
5	Electronics	9	24	27	31 *
4	Program for Academically Talented	15	5	18	9
3	Psychological Testing	17	59	29	17 *
4	Program for Mentally Handicapped	29 *	2	8	8
4	Program for Average Pupils	19	7	7	19
5	Human Services	21	13	30	37
7	Instruc. for Students Home Bound	27 *	10	54	62 x
5	Business	12 *	33	9	22
4	Program for Students Terminating Education with High School	22	37	3	7
7	Resource Persons for Use in Class.	26 x	21	55	38
5	Applied Arts	20	22	66	57 *
7	Flexibility in Instruction	28 *	44 *	50	35
5	Agricultural	18 x	12 *	11	13
5	Auto Shop	13 *	30 *	20	15
8	Add'l Textbooks & Instruc. Supply	24	16	56	27
8	Teaching Personnel	33	60	57	5
7	Programmed Textbooks, Teach. Mach. and/or Computer Asst. Instruction	30	34	60	58
8	County or Regional Programs of Shared Services	25	27	48	20
6	Post-Grad. Employment Specialist	35	42	24	53
7	Team Teaching	36	35	62	50
5	Industrial	16 *	20 *	10	12
4	Program for Emotionally Disturbed	34	11	32 *	25 x
6	Academic Placement Specialist	38	45	25	44
7	Audio-Visual Instruction	39	51	63	48
7	Closed Circuit TV in School	42	32	70	65



Table 18--Continued

Cat. No.	EDUCATIONAL NEEDS	12th Graders Rank	8th Graders Rank	Parents Rank	Educa- tors Rank
1	Foreign Languages	32	26	23	41
3	External Sources of Referral for Children with Problems	41	39	43	23
8	Add'l Audio-Visual Mat'l & Equip.	46	43	61	28
6	School Psychologist	45	49	34	33
1	Fine Arts	40	53	35	43
1	Practical Arts	37	36	16	42
4	Program for Physically Handicapped	48	28	36	67
6	Social Worker	50	25	44	45
1	Sec. School Voc-Tech. Programs	43	71	22	34
8	More Paraprofessional Personnel	49	23	59	16
5	Home Economics	31	40	15	30
1	Science	44	63	21	51
6	School Health Nurse	51	18	33	40
6	Special Education Teacher	53	31	17	26
3	Elemen. School Guidance Service	52	29	26	24
1	Health and Physical Education	47	50	45	59
6	Reading Specialist	55	52	13	21
1	Mathematics	54	57	19	52
1	Language Arts	56	69	28	36
7	Televised Educ. Prog. to Home	58	46	67	64
1	Social Studies	57	65	41	61
8	More Adm. and Supervisory Personnel	59	61	69	71
6	Speech Therapist	60	64	31	39
2	Kindergarten Education	62	38	38	49
2	Post-Sec. Voc-Tech. Education	63	67	40	54
6	Librarian and/or Audio-Vis. Spec.	61	55	58	46
2	Secondary Education	64	58	42	60
2	Adult Education	65	66	47	56
2	Elementary Education	66	54	39	55
4	Program for Culturally Distinct	67	56	68	70
2	Junior College	68	62	52	68
3	Pre-School Guidance Service	69	41	64	66
2	College-University Education	70	68	65	69
2	Early Childhood Education	71	70	71	63
2	Infant Education	72	72	73	72

\*Denotes difference in rankings for this item of eleven through fourteen positions.

\*Denotes difference in rankings for this item of fifteen or more positions. Differences are based on a comparison of the rankings for this item of respondents representing the several levels of the variable.

by 3A-NA, and the same category for educators which was ranked 5th under the 1A-2A heading and 2nd under 3A-NA. Twelfth graders also ranked this same category differently, giving it a rank of 4th for 1A-2A and 1st for 3A-NA; thus indicating considerably more importance placed on these services by respondents from the smaller districts. Twelfth graders disagreed between accreditation levels by two or more rank positions on six of the ten categories; 5, vocational-technical programs, received a rank of 5th by 1A-2A respondents and 2nd by 3A-NA respondents.

Tables 16 and 18 present the item rankings by respondents representing 1A-2A and 3A-NA districts respectively. For the twenty-five highest ranked items based on the statewide composite rankings, those items that respondents from 1A-2A differed by more than fifteen positions compared to 3A-NA respondents are marked with asterisks; x is used for items where the rankings differed by eleven through fourteen positions. For 7, individualized instruction programs, respondents from all four populations in 1A-2A districts viewed this item as a greater need while for 12, group counseling, respondents from all but the educator population in 3A-NA districts viewed this as a greater need. Several other items received considerably greater interest by one or more groups, both for items included or not included in the first twenty-five based on the statewide composite ranks. Particular attention might be directed to the following items which both 8th and 12th graders agreed needed further attention depending upon accreditation level. Items 25, agricultural, 26 auto shop, and 33, industrial arts, were ranked more favorably by students from 3A-NA districts while 24, flexibility in instruction, and 34, program for emotionally disturbed, were ranked higher by students from 1A-2A districts.

Finally, the results obtained when ranking the responses of the four populations, according to three enrollment sizes of their school district will be presented. Tables 19, 21, and 23 give the rankings of the ten categories, and tables 20, 22, and 24 give the rankings of the 72 items by less than a hundred, one to four hundred, and over four hundred secondary (9-12) enrollment.

TABLE 19  
RANKINGS OF STUDENTS, PARENTS, AND EDUCATORS FROM DISTRICTS  
WITH LESS THAN ONE HUNDRED SECONDARY ENROLLMENT  
OF 10 EDUCATIONAL CATEGORIES

Cat. No.	MAJOR CATEGORIES	12th	8th	Parents	Educators
		Graders Rank N=253	Graders Rank N=223	Rank N=148	Rank N=155
1	Academic Subject Fields	6	7	3	5
2	Level of Education	10	8	9	10
3	Counseling & Psychological Services	2	6	4	3
4	Educational Programs for Students	3	1	1	1
5	Vocational-Technical Programs	1	3	2	2
6	School Services for Pupils	7	4	5	7
7	Instructional Approaches	5	5	10	6
8	More Money for Education	4	2	6	4
9	On-the-job Training for Teachers	9	10	8	8
10	Adm. Svs. and Teacher Personnel	8	9	7	9

TABLE 21

RANKINGS OF STUDENTS, PARENTS, AND EDUCATORS FROM DISTRICTS  
WITH ONE TO FOUR HUNDRED SECONDARY ENROLLMENT  
OF 10 EDUCATIONAL CATEGORIES

Cat. No.	MAJOR CATEGORIES	12th	8th	Parents	Educators
		Graders Rank N=766	Graders Rank N=830	Rank N=484	Rank N=449
1	Academic Subject Fields	8	7	5	8
2	Level of Education	10	8	6	9
3	Counseling & Psychological Services	1	5	3	3
4	Educational Programs for Students	2	1	1	1
5	Vocational-Technical Programs	4	4	2	4
6	School Services for Pupils	6	6	4	5
7	Instructional Approaches	5	3	9	7
8	More Money for Education	3	2	8	2
9	On-the-job Training for Teachers	9	9	10	6
10	Adm. Svs. and Teacher Personnel	7	10	7	10

TABLE 23

RANKINGS OF STUDENTS, PARENTS, AND EDUCATORS FROM DISTRICTS  
WITH OVER FOUR HUNDRED SECONDARY ENROLLMENT  
OF 10 EDUCATIONAL CATEGORIES

Cat. No.	MAJOR CATEGORIES	12th	8th	Parents	Educators
		Graders Rank N=178	Graders Rank N=311	Rank N= 79	Rank N=290
1	Academic Subject Fields	6	7	2	8
2	Level of Education	10	8	6	10
3	Counseling & Psychological Services	2	5	4	4
4	Educational Programs for Students	4	1	1	2
5	Vocational-Technical Programs	5	4	3	3
6	School Services for Pupils	8	6	5	7
7	Instructional Approaches	3	2	7	5
8	More Money for Education	1	3	9	1
9	On-the-job Training for Teachers	9	9	8	6
10	Adm. Svs. and Teacher Personnel	7	10	10	9

TABLE 20

RANKINGS OF STUDENTS, PARENTS, AND EDUCATORS FROM DISTRICTS  
WITH LESS THAN ONE HUNDRED SECONDARY ENROLLMENT  
OF 72 EDUCATIONAL NEEDS

Cat. No.	EDUCATIONAL NEEDS	12th Graders Rank	8th Graders Rank	Parents Rank	Educa- tors Rank				
3	Personal Counseling	2	29	x	7	8			
4	Program for Slow Learners	4	1		1	1			
8	Better Classroom Facil. & Equip.	3	3		36	* 19	x		
3	Educational-Vocational Guidance	1	x	58	*	9	6		
4	Program for Alienated Youth	7		6		2	4		
5	Skilled Trades	6		11	x	3	2		
7	Individualized Instruction Prog.	25	*	57	*	52	* 24	*	
8	More Specialized Personnel	17	x	16		49	47	*	
3	Advisory Services to Teacher	13		47	*	22	x	14	
8	Better Libraries & Instructional Facilities & Equipment	12		5		38	*	17	
3	Junior H.S. Guidance Service	19		15		19	12	*	
3	Group Counseling	11		41	x	33	*	39	*
5	Electronics	5	*	27		27	26	*	
4	Program for Academically Talented	18	*	4		12	*	5	
3	Psychological Testing	21	x	70	*	31	23	*	
4	Program for Mentally Handicapped	31	*	2		18	*	3	*
4	Program for Average Pupils	16		8		10	*	11	x
5	Human Services	20	x	20		54	*	42	*
7	Instruc. for Students Home Bound	32	*	19	x	60	*	56	x
5	Business	10	*	35	*	14	*	20	x
4	Program for Students Terminating Education with High School	24		38	x	4	7		
7	Resource Persons for Use in Class.	29	x	32	*	59	*	34	x
5	Applied Arts	23		33	x	68	*	62	*
7	Flexibility in Instruction	36	*	43	*	57	29	*	
5	Agricultural	9	*	9	*	6	*	9	*
5	Auto Shop	15	*	21	*	21	13		
8	Add'l Textbooks & Instruc. Supply	22		13		46	x	22	
8	Teaching Personnel	38		37		43	10		
7	Programmed Textbooks, Teach. Mach. and/or Computer Asst. Instruction	34		45		62	50		
8	County or Regional Programs of Shared Services	26		17		37	16		
6	Post-Grad. Employment Specialist	27		25		25	53		
7	Team Teaching	42		39		61	41		
5	Industrial	8	*	14	*	8	15		
4	Program for Emotionally Disturbed	40	x	10		32	*	45	*
6	Academic Placement Specialist	35		24		26	48		
7	Audio-Visual Instruction	43		54		64	37		
7	Closed Circuit TV in School	46		44		70	64		

Table 20--Continued

Ca. No	EDUCATIONAL NEEDS	12th Graders Rank	8th Graders Rank	Parents Rank	Educa- tors Rank
1	Foreign Languages	33	28	23	38
3	External Sources of Referral for Children with Problems	37	61	50	25
8	Add'l Audio-Visual Mat'l & Equip.	47	22	53	21
6	School Psychologist	50	48	41	44
1	Fine Arts	41	46	34	35
1	Practical Arts	28	26	13	30
4	Program for Physically Handicapped	49	34	39	68
6	Social Worker	51	18	56	63
1	Sec. School Voc-Tech. Programs	30	71	24	32
8	More Paraprofessional Personnel	55	30	48	28
5	Home Economics	14	23	5	18
1	Science	45	63	17	40
6	School Health Nurse	52	7	35	49
6	Special Education Teacher	48	12	16	33
3	Elemen. School Guidance Service	54	53	30	31
1	Health and Physical Education	39	36	47	60
6	Reading Specialist	53	40	15	27
1	Mathematics	44	56	11	43
1	Language Arts	56	66	20	36
7	Televised Educ. Prog. to Home	57	49	69	58
1	Social Studies	58	67	28	61
8	More Adm. and Supervisory Personnel	61	59	67	70
6	Speech Therapist	60	52	39	51
2	Kindergarten Education	63	42	44	52
2	Post-Sec. Voc.-Tech. Education	62	65	40	55
6	Librarian and/or Audio-Vis. Spec.	59	31	55	46
2	Secondary Education	64	60	45	59
2	Adult Education	66	68	51	57
2	Elementary Education	65	55	42	54
4	Program for Culturally Distinct	71	50	65	71
2	Junior College	67	62	58	66
3	Pre-School Guidance Service	69	51	63	65
2	College-University Education	68	64	66	69
2	Early Childhood Education	70	69	71	67
2	Infant Education	72	72	73	74

\*Denotes difference in rankings for this item of eleven through fourteen positions.

\*Denotes difference in rankings for this item of fifteen or more positions  
Differences are based on a comparison of the rankings for this item of respondents representing the several levels of the variable.

TABLE 22

RANKINGS OF STUDENTS, PARENTS, AND EDUCATORS FROM DISTRICTS  
WITH ONE TO FOUR HUNDRED SECONDARY ENROLLMENT  
OF 72 EDUCATIONAL NEEDS

Cat. No.	EDUCATIONAL NEEDS	12th Graders Rank	8th Graders Rank	Parents Rank	Educa- tors Rank		
3	Personal Counseling	1	15	x	6	9	
4	Program for Slow Learners	2	1		1	1	
8	Better Classroom Facil. & Equip.	3	3		49	* 8 x	
3	Educational-Vocational Guidance	5	x 37	*	8	14	
4	Program for Alienated Youth	4	4		2	2	
5	Skilled Trades	7	18	x	3	6	
7	Individualized Instruction Prog.	8	*	21	*	44	* 35 *
8	More Specialized Personnel	6	x 14		48	25 *	
3	Advisory Services to Teacher	9		24	*	10	x 13
8	Better Libraries & Instructional Facilities & Equipment	10	7		55	*	16
3	Junior H.S. Guidance Service	11	13		13		17 *
3	Group Counseling	13	31	x	45	*	55 *
5	Electronics	15	*	23		24	27 *
4	Program for Academically Talented	12	*	9		17	* 4
3	Psychological Testing	16	x	52	*	22	22 *
4	Program for Mentally Handicapped	14	*	2		5	* 5 *
4	Program for Average Pupils	23		6		7	* 23 x
5	Human Services	19	x	11		19	* 36 *
7	Instruc. for Students Home Bound	24	*	5	x	52	* 62 x
5	Business	28	*	36	*	9	* 28 x
4	Program for Students Terminating Education with High School	17		38	x	4	7
7	Resource Persons for Use in Class.	18	x	16	*	50	* 38 x
5	Applied Arts	25		20	x	60	* 46 *
7	Flexibility in Instruction	20	*	33	*	53	37 *
5	Agricultural	21	*	32	*	12	* 19 *
5	Auto Shop	22	*	49	*	18	21
8	Add'l Textbooks & Instruc. Supply	27		17		56	x 24
8	Teaching Personnel	35		57		58	3
7	Programmed Textbooks, teach. Mach. and/or Computer Asst. Instruction	26		12		61	57
8	County or Regional Programs of Shared Services	31		27		47	31
6	Post-Grad. Employment Specialist	34		47		26	50
7	Team Teaching	29		26		62	40
5	Industrial	37	*	40	*	14	15
4	Program for Emotionally Disturbed	32	x	8		20	* 18 *
6	Academic Placement Specialist	36		39		23	39
7	Audio-Visual Instruction	30		30		63	48
7	Closed Circuit TV in School	33		10		70	67

Table 22--Continued

Cat., No.	EDUCATIONAL NEEDS	12th Graders Rank	8th Graders Rank	Parents Rank	Educa- tors Rank
1	Foreign Languages	41	41	29	52
3	External Sources of Referral for Children with Problems	40	45	41	30
8	Add'l Audio-Visual Mat'l & Equip.	38	25	59	33
6	School Psychologist	39	43	36	29
1	Fine Arts	44	62	39	49
1	Practical Arts	49	51	16	54
4	Program for Physically Handicapped	45	19	37	68
6	Social Worker	42	34	42	32
1	Sec. School Voc-Tech. Programs	51	68	27	41
8	More Paraprofessional Personnel	45	29	57	12
5	Home Economics	55	48	28	44
1	Science	50	54	31	58
6	School Health Nurse	46	22	30	34
6	Special Education Teacher	47	28	15	11
3	Elemen. School Guidance Service	48	44	21	20
1	Health and Physical Education	54	55	51	56
6	Reading Specialist	52	42	11	10
1	Mathematics	57	59	25	60
1	Language Arts	56	70	35	43
7	Televised Educ. Prog. to Home	53	35	67	65
1	Social Studies	61	67	54	61
8	More Adm. and Supervisory Personnel	58	61	69	72
6	Speech Therapist	59	60	32	26
2	Kindergarten Education	60	50	33	45
2	Post-Sec. Voc-Tech. Education	62	66	34	47
6	Librarian and/or Audio-Vis. Spec.	67	56	68	42
2	Secondary Education	65	63	40	59
2	Adult Education	64	65	43	51
2	Elementary Education	65	53	38	53
4	Program for Culturally Distinct	63	46	64	70
2	Junior College	68	64	46	66
3	Pre-School Guidance Service	70	58	65	64
2	College-University Education	71	71	66	69
2	Early Childhood Education	69	69	71	63
2	Infant Education	72	72	72	71

\*Denotes difference in rankings for this item of eleven through fourteen positions.

\*Denotes difference in rankings for this item of fifteen or more positions. Differences are based on a comparison of the rankings for this item of respondents representing the several levels of the variable.



TABLE 24

RANKINGS OF STUDENTS, PARENTS, AND EDUCATORS FROM DISTRICTS  
WITH OVER FOUR HUNDRED SECONDARY ENROLLMENT  
OF 72 EDUCATIONAL NEEDS

Cat. No.	EDUCATIONAL NEEDS	12th Graders Rank	8th Graders Rank	Parents Rank	Educa- tors Rank
3	Personal Counseling	4	28 x	11	17
4	Program for Slow Learners	8	2	3	5
8	Better Classroom Facil. & Equip.	2	1	63 *	7 x
3	Educational-Vocational Guidance	13 x	51 *	12	15
4	Program for Alienated Youth	1	4	5	3
5	Skilled Trades	15	23 x	1	2
7	Individualized Instruction Prog.	3 *	16 *	29 *	11 *
8	More Specialized Personnel	10 x	14	52	23 *
3	Advisory Services to Teacher	11	32 *	14 x	18
8	Better Libraries & Instructional Facilities & Equipment	14	9	55 *	19
3	Junior H.S. Guidance Service	9	18	17	30 *
3	Group Counseling	19	30 x	56 *	47 *
5	Electronics	22 *	20	19	8 *
4	Program for Academically Talented	34 *	8	33 *	9
3	Psychological Testing	7 x	46 *	26	43 *
4	Program for Mentally Handicapped	25 *	3	2 *	27 *
4	Program for Average Pupils	24	11	35 *	22 x
5	Human Services	32 x	17	41 *	26 *
7	Instruc. for Students home bound	6 *	5 x	43 *	51 x
5	Business	29 *	10 *	34 *	14 x
4	Program for Students Terminating Education with High School	20	52 x	8	6
7	Resource Persons for Use in Class.	16 x	27 *	37 *	25 x
5	Applied Arts	21	19 x	44 *	37 *
7	Flexibility in Instruction	12 *	25 *	54	21 *
5	Agricultural	49 *	37 *	30 *	24 *
5	Auto Shop	47 *	53 *	23	16
8	Add'l Textbooks & Instruc. Supply	17	12	60 x	20
8	Teaching Personnel	5	38	59	1
7	Programmed Textbooks, Teach. Mach. and/or Computer Asst. Instruction	30	6	70	39
8	County or Regional Programs of Shared Services	28	35	53	12
6	Post-Grad. Employment Specialist	23	42	27	48
7	Team Teaching	18	22	57	32
5	Industrial	52 *	39 *	18	10
4	Program for Emotionally Disturbed	27 x	13	13 *	13 *
6	Academic Placement Specialist	38	36	31	44
7	Audio-Visual Instruction	39	31	64	54
7	Closed Circuit TV in School	40	7	68	46

Table 24--Continued

Cat.. No.	EDUCATIONAL NEEDS	12th Graders Rank	8th Graders Rank	Parents Rank	Educa- tors Rank
1	Foreign Languages	46	49	10	56
3	External Sources of Referral for Children with Problems	43	44	32	31
8	Add'l Audio-Visual Mat'l & Equip.				
6	School Psychologist	42	45	24	34
1	Fine Arts	33	59	42	50
1	Practical Arts	37	48	7	40
4	Program for Physically Handicapped	26	21	22	52
6	Social Worker	51	40	47	36
1	Sec. School Voc-Tech. Programs	41	71	9	35
8	More Paraprofessional Personnel	48	24	61	4
5	Home Economics	54	26	49	45
1	Science	36	50	4	55
6	School Health Nurse	53	29	51	38
6	Special Education Teacher	57	43	* 20	41 *
3	Elemen. School Guidance Service	50	47	21	28
1	Health and Physical Education	45	54	38	58
6	Reading Specialist	56	56	25	29
1	Mathematics	58	58	6	57
1	Language Arts	44	67	16	42
7	Televised Educ. Prog. to Home	55	34	65	49
1	Social Studies	31	62	15	53
8	More Adm. and Supervisory Personnel	59	70	69	73
6	Speech Therapist	71	61	50	59
2	Kindergarten Education	61	57	23	63
2	Post-Sec. Voc-Tech. Education	63	68	36	61
6	Librarian and/or Audio Vis. Spec.	68	60	71	62
2	Secondary Education	62	55	45	67
2	Adult Education	67	63	46	66
2	Elementary Education	64	41	39	65
4	Program for Culturally Distinct	60	33	48	64
2	Junior College	66	65	58	69
3	Pre-School Guidance Service	65	66	40	60
2	College-University Education	69	49	62	70
2	Early Childhood Education	70	64	66	68
2	Infant Education	72	72	73	72

\*Denotes difference in rankings for this item of eleven through fourteen positions.

\*Denotes difference in rankings for this item of fifteen or more positions. Differences are based on a comparison of the rankings for this item of respondents representing the several levels of the variable.

Close study of the category rankings indicate few major deviations from the statewide rankings for any of the three enrollment classifications. Actually, only four deviations of greater than two rank positions were noted of the 120 ranks shown in the three tables; two each for less than a hundred and for over four hundred enrollment. Further, relatively few rank differences of greater than one were found between responses of the same population for the same item between the different enrollment classifications. Only for 39 of the 120 item rankings did a difference of two or more rank positions occur. Finally, for only the following two categories did these rank differences appear to form a pattern; 7, instructional approaches used by teachers, where students and parents from districts with over four hundred secondary enrollment indicated this category of greater importance, and 8, more money for the various aspects of education, where 12th graders and educators from the larger districts indicated greater importance for this category while parents indicated lesser importance.

The item rankings of respondents from districts with less than one hundred, one to four hundred, and over four hundred enrollment are presented in Tables 20, 22, and 24, respectively. The rankings for items which differed across enrollment levels by eleven to fourteen or over fifteen positions are marked by an x and asterisk, respectively. For items 7, individualized instruction programs, and 19, instruction for students homebound by illness, all four populations from the districts with over four hundred enrollment rated these items as more important while the reverse was true for 25, agricultural. For items 15, psychological testing, and 24, flexibility in instruction, students and educators from the larger districts rated this as more important, while for items 23, applied arts, and 34, program for emotionally disturbed, the same result occurred for parents and educators. Finally, for items 20, business, and

22, resource persons for use in the classroom, all four populations rated these items differently across enrollment levels, but there was no consistent pattern to these variations. Other variations occurred, especially for items beyond the first twenty-five composite ranked needs.

#### Rankings of Educational Needs by Other Populations

From 300 to 500 questionnaires were submitted, in the manner described in Chapter II, to each of five populations including dropouts, migrants, college graduates, members of senior citizen clubs and welfare recipients. Further, school board members in each of the fifty-four selected districts were submitted a copy of the educator instrument. There were approximately 270 board members in these districts.

Returns from these populations were very limited. The following number of usable returns were received for each population; 97 school board members, 51 dropouts, 17 migrants, 51 college graduates, 39 senior citizens, and 35 welfare recipients. This represents approximately a 10 per cent overall return. Not included in these return figures were some one-hundred questionnaires which were only partially completed and not useable for this phase of the need assessment. But even with these returns included, the percentage of returns is considerably below what was anticipated and what should be received from any random sample.

At least a partial explanation for these limited returns can be found in the following problems encountered with this phase of the assessment. It will be noted that two basic procedures were used to reach respondents from these populations. The first was mailing a copy of the instrument directly to the respondents as in the case of the migrants and college graduates. In both

cases, and especially for the migrants, it was found that the mailing lists used were considerably out-of-date. The number of letters returned indicating no forwarding or insufficient address is evidence of this problem. The second procedure used to reach respondents was through a third party. In the case of the school board members, the third party was the district superintendent who was contacted in advance with a request to participate in this project. The other three populations were reached through other local agencies; i.e., senior citizen clubs, county welfare boards, and local offices of the State Employment Service. Three problems contributed to the low level of returns from these populations. First, these agencies were often tied up with required activities; thus, distribution of these forms was not according to the suggested time schedule given in the cover letter to these agencies. Returns were still being received as of the date of this report and, if significant, will be submitted in an addendum to this report. Second, the reading level of the questionnaire was suspect when considering the few returns from these populations. Feedback from school administrators indicated that the eighth grade was about the youngest age group that could generally read and comprehend this instrument. Yet it should be noted that the dropouts and welfare recipients generally are lower in reading ability and other educational aspects than the eighth graders. Actually, dropouts often "drop out" because they are not succeeding in the academic setting. The Employment Service reported it necessary to utilize the assistance of a counselor to assist dropouts in completing the instrument. Finally, the welfare and dropout returns were somewhat dependent upon the potential respondents reporting to the local office of the particular agency in order to receive a copy of the questionnaire.

Tables 25 and 26 present the results of category and need item rankings

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Table 26--Continued

Cat. No.	EDUCATIONAL NEEDS	School Board	Migrant	Drop Outs	Wel- fare	Senior Citizen
3	Group Counseling	58	30	36	31	30
7	Social Worker	59	65	19	40	20
8	Individualized Instruction Program	43 *	32 x	18	76 *	59 *
10	Regional Educational Centers	57	66	51	65	76
1	Social Studies	42	63	68	23	57
2	Adult Education	46	82	53	58	29
9	County/Regional Prog. Shared Serv.	8	22	38	32	22
9	Better Classroom Facilities	11	16.5	7	42 *	38 *
10	Increased No. Teacher Applicants	49	81	67	50	84
1	Health and Physical Education	67	67	48	18	64
5	Instruc. Developing Pupil Motivation	66	26	71	53	48
9	More Specialized Personnel	39 *	36 *	6	38 *	22
8	Resource Persons Use in Classroom	54 *	50 *	34	81 *	60 *
10	Better Incentives/Teacher Retention	51	41	80	49	78
9	Better Libraries & Instruc. Centers	10	13	39 *	51 *	46 *
5	Instruction in Pupil Guidance	72	39	72	56	56
8	Flexibility in Instruction	56	42	43	77	55
8	Instruc./Students Home Bound/Illness	62	70	20	75	58
2	Junior College	71	85	75	60	54
10	Teacher Util. and Specialization	79	64	61	74	71
5	Instruc. Teaching Child w/Disabilities	74	51	83	55	51
9	Add'l Textbooks & Instruc. Supply	23	48 *	42 *	52 *	66 *
9	Teaching Personnel	6	4	24	41	28
9	More Paraprofessional Personnel	16	16.5	28	45	48
10	Educational Research	41	73	62	66	81
5	Instruc. Individ. Learning Process	80	27	76	71	67
9	Add'l Audio-Visual Mat'l & Equip.	25	31	65	79	86
8	Team Teaching	63	58	35	83	70
10	Teacher Involvement in Negotiations	77	56	77	62	71
3	Pre-School Guidance Service	87	54	29	73	26
8	Prog'd Textbooks, Teach. Mach.	69	60	63	85	79
5	Instruc. in Subject Matter	75	61	84	59	73
8	Audio-Visual Instruction	65	52	69.5	82	88
6	Applied Arts	70	19	44	88	61.5
4	Program for Culturally Distinct	89	57	85	69	40
2	College-University Education	76	86	82	70	87
5	Instruc. in Curriculum Development	78	44	86	63	74
7	Librarian, Audio-Visual Specialist	68	55	88	72	63
5	Instruction in Selection Audio-Visual	82	68	87	67	83
5	Instruction in Understanding Research	85	77	79	68	81
8	Televised Education Programs to Home	81	72	69.5	84	77
9	More Adm. & Supervisory Personnel	61	80	78	90	72
5	Instruc. in Using Team Teaching	84	76	89	80	85
10	Data Processing for School Mgmt.	86	79	73	86	90
8	Closed Circuit TV in School	83	75	81	89	75
2	Early Childhood Education	88	81	64	64	43
2	Infant Education	90	90	90	87	89

respectively for the several populations identified previously. It will be noted in Table 25, which presents the rankings for each population of the ten categories, that 4, educational programs for students with particular needs, and 6, vocational-technical programs, generally were ranked one-two. It will be further noted that beyond these two categories, the rankings vary considerably from population to population. Some of this variation might be the result of the limited number of returns.

TABLE 25  
RANKINGS OF OTHER POPULATIONS OF 10 EDUCATIONAL CATEGORIES

Cat. No.	MAJOR CATEGORIES	School Board	College Migrant	Drop-Outs	Welfare	Senior Citizen
1	Academic Subject Fields	4	7	4	7	4
2	Level of Education	7	10	8	5	8
3	Counseling & Psych. Services	6	4	5	2	3
4	Educ. Prog. for Students	1	1	1	1	1
5	On-Job Training for Teachers	10	6	10	8	9
6	Vocational-Tech. Education	3	2	2	3	2
7	School Services for Pupils	5	5	6	4	5
8	Instructional Approaches	9	8	7	9	10
9	More Money for Education	2	3	3	6	6
10	Adm. Services & Teacher Pers.	8	9	9	10	7

Considering the need item rankings shown in Table 26, it is apparent that the variation in responses noted for the category rankings was carried over to the item rankings. Those needs for each population which differed from the first twenty-five ranked items on the basis of composite score by eleven through fourteen positions are indicated by an x, while an asterisk indicates items differing in ranks by fifteen or more.

School board members ranked as considerably less important than the statewide composite rank the various counseling and psychological services.



Also ranked lower were the following vocational needs, business and industrial arts. College graduates-migrants differed but slightly from the statewide composite ranks. Dropouts also ranked a few items of lesser importance, but did not rank highly any replacements. Welfare recipients ranked as anticipated items requiring additional expenditures for education as of lesser importance. Items which they ranked of lesser importance included better classroom facilities and equipment, better libraries, additional books and supplies, etc. Finally, senior citizens surprisingly ranked agriculture as of considerably lesser importance.

#### Instrument Reliability

It was indicated in Chapter 2 that a study of the instrument reliability would be made in conjunction with the statewide need assessment. Before reporting the results of this effort, the validity of the instrument should again be considered. Basically, face validity of the instrument was established in two manners; first, the items included in this instrument were selected for the most part from instruments used in need assessments in other states. These instruments, in many cases, had been validated for the purposes for which they were used. Second, a doctoral level class in educational measurements was requested to analyze the instrument for content and methodology. Modifications were made as suggested.

A test-retest reliability study was undertaken. Two schools were selected and requested to readminister the senior and educator instruments at six week intervals. Matching returns were received from 31 educators and 68 seniors. Two procedures were used to test the reliability of the instrument; correlation and frequency of similar answers.

Since the data obtained with this instrument were, at best, ordinal, a non-parametric correlation was the only possible approach. A Spearman rank correlation coefficient was calculated separately for seniors and for educators. This was accomplished by ranking separately the pre- and post-instrument administrations and following the procedures outlined in Siegel, Non-Parametric Statistics, for calculating the correlation coefficients. The values obtained were .91 for education and .85 for seniors. These values are highly significant, being in excess of all tabled values for the recommended test of significance.

Another measure of reliability was a determination of the frequency of similar responses between the two test administrations. The following list presents the frequency of matching choices between the two administrations, the frequency where the rank changed by one position, the frequency where the rank changed by more than one position, and the frequency of responses not in agreement between the two administrations.

EDUCATORS				
	Match	Changed by One	Changed by 2 or more	No Agreement
	<u>N/%</u>	<u>N/%</u>	<u>N/%</u>	<u>N/%</u>
Categories	23/14.8	48/31.0	37/23.9	47/30.3
Needs	203/26.2	181/23.4	194/25.0	197/25.8
SENIORS				
Categories	23/9.6	39/16.2	61/25.4	117/48.7
Needs	97/10.5	130/14.1	258/28.0	435/47.3

It will be noted that educators responded with closely similar category and need ranks nearly 50 per cent of the time, while seniors did so only 25 per cent of the time. This agrees with the correlation findings reported previously.

## CHAPTER V

### JUSTIFICATION OF THE CRITICAL NATURE OF HIGHLY RANKED EDUCATIONAL NEEDS

This chapter contains the reports of specialists in the areas of the third highest ranked educational needs. These reports are written according to the directions given in the contract form included as Appendix E.

As indicated in the description of procedures given in Chapter II, and in the time schedule presented in Section 2.3.1 of the 1970 State Plan (refer to Appendix A), there was considerable overlap between need assessment and need justification. Thus, in order to meet the December 31st deadline for this need assessment report, it was necessary to develop the justification reports on the basis of the needs highly ranked in the pilot study. Therefore, the reports presented in this chapter cover more than the first twenty-five ranked needs to protect against potential changes in rankings between the pilot and statewide assessments.

Since the educational needs were grouped under several headings or categories, it appeared useful to continue these groupings in the reports justifying the highly ranked needs. Each specialist prepared statements concerning two or more needs and was further requested to present reports where the common aspects of all their needs could be covered in the introductory paragraphs. Thus, it is not possible to present the justification reports in the order the needs were ranked. Rather, the reports are presented by groupings or categories according to the following order:

## 5.2

TITLE OF REPORT	AUTHOR/REACTOR	PAGE
Educational Programs for Students of Varying Achievement Levels	Dr. Quinn Brunson Dr. Clyde Morris	5.3
Programs for Students with Learning Disabilities	Dr. Steven D. Harlow Dr. Vernon F. Harmeson	5.15
Counseling and Guidance Services	Dr. Eldon Gade Dr. John Tieglend	5.21
Curriculum Areas for K-12 Education	Dr. Richard Landry Dr. Clyde Morris Dr. Ervin Behsman	5.31
Flexibility in Education	Dr. A. W. Sturges Dr. Thomas Jenson	5.41
Psychological Services	Dr. Esther Noll Dr. John Noll	5.45
Reading and Speech Services	Dr. James Feebles	5.49
Equipment, Facilities, and Personnel for Education	Dr. Archie Gray Dr. Clyde Morris	5.55
Vocational Education	Dr. Dorothy Grovum	5.63

It should be clearly understood that each specialist presented evidence which in his or her judgment was the most pertinent available. While this chapter is titled "justification," the specialists were clearly requested to indicate a need as being critical only if in their judgment this was justifiable. Again, these judgments are not necessarily the recommendations of the state evaluator or anyone else concerned with this assessment study or Title III. These judgments are intended to serve solely the purpose of providing further evidence which might prove useful to the Title III State Advisory Council and the staff of the Department of Public Instruction in arriving at a determination of the state's critical educational needs.

EDUCATIONAL PROGRAMS FOR STUDENTS  
OF VARYING ACHIEVEMENT LEVELS

Author: Dr. Quinn Brunson  
Coordinator, Clinical Experiences  
Reactor: Dr. Clyde Morris  
Director, Division of Educational  
Administration

EDUCATIONAL NEEDS COVERED IN THIS REPORT

Program for Alienated Youth  
Program for Academically Talented  
Program for Students Terminating Education  
with High School  
Program for Educationally Disadvantaged  
Program for Average Pupils

Words are personal. Their meanings can be varied, and this is especially true when lay people and professional people are involved. In this paper the concern is with five phrases which must be considered in light of what they mean to the lay person.

"Alienated Youth," to the majority of people, refers to young people who do not find school as meeting an immediate need or making a contribution to their future. They are young people who, to various degrees, have moved away from the mores of, and services provided by, society. There seems to be a belief by lay people that if educators just knew how they could entice these young people back then, through carefully designed programs, these students would change and again become part of the mainstream of society.

Alienated youth are those who are school drop-outs. They may physically be leaving school or they may be psychologically out of school with the physical separation still two or three years in the future.

To a great extent, it is difficult to separate the youths who are alienated from those who terminate their formal education upon completion of the

#### 5.4

twelfth grade. Our society is increasingly demanding more complex skills and higher degrees of ability. Education and training beyond the traditional high school is not a luxury but a necessity for an ever increasing number of jobs. Thus, the student who does not plan on continuing school after high school graduation could be classified as one who is terminating his education or as an alienated youth. The latter classification is appropriate because he apparently fails to see the necessity for this additional preparation and so has removed (i.e., alienated) himself from needs as seen by society.

The average lay person, however, sees "Terminal Education" as those programs in the high school which are designed to help the student develop a skill which is salable immediately upon graduation. It is granted that these skills may not be fully developed or that they do not open the doors to highly sophisticated positions but, nevertheless, they are vocational in nature and do place the student above the rank of non-skilled labor.

The term "Academically Talented," to most people, lay and professional, refers to those students who are especially capable in the traditional school subjects. They often are referred to as "smart" or "egg-head." Regardless of the name applied, they are students who are extremely capable in thinking and reasoning especially in the area of abstract concepts.

Students who are "Educationally Disadvantaged" have, for some reason, been unable to obtain the basic skills which would more certainly assure them of success in school. The majority of lay people appear to think of this term as including pupils having low I.Q.'s as well as those who were denied educational opportunities whether such was due to poor attendance, illness, poor schools, or poor teaching. These pupils do not have the basic skills required

## 5.5

to attain even average success in school because of some condition in their mental or physical make-up or through some lack in the educational program or its personnel. They are below average for some reason over which they had but little control.

"Average Pupils," to the majority of lay people, refers to that large group of young people who do not require special consideration because of their ineptness or extreme superiority in school subjects or their lack of conformity to the guidelines established by society. To be more precise would at best be difficult and it may be impossible.

Alienated Youth Alienated youth have been a concern of educators for many years. Evidence of this includes the figures on "holding power" which have been accumulated by schools. These figures indicate the purposefulness of school programs or the ability of counselors to convince students of that fact.

One of the first voices raised nationally was Havighurst calling for a national policy for alienated youth in an article written for the Phi Delta KAPPAN in 1961.

Alienated youth have to be identified prior to their announcement of leaving school. Psychologically, they drop out two or three years prior to the physical act. It is only during this interval that specific school programs can have an effect.

A number of school systems, spread across the United States, have programs aimed at the potential drop-out. These programs tend to be located in the inner-city portions of large urban school districts. These programs, such as STEP (School To Employment Program) in New York, emphasize the "outside" world and involve joint and cooperative planning by pupils and teachers.

## 5.6

Also, the statements of the U.S. Commissioner of Education James Allen, concerning the national goal for education of the seventies, concerns alienated youth and the educational disadvantages; "no one shall be leaving our schools without the skill and the desire necessary to read to the full limits of his capability." Some data given by Allen in support of this need, "one out of four students has significant reading deficiencies; up to half of the students in large city systems read below grade level; there are 3 million illiterates in the adult population; about half of the unemployed youth, ages 16-21, are functionally illiterate; three-quarters of the juvenile offenders in New York City are two or more years retarded in reading."

An interesting program to meet these needs would appear to be the Texarkana reading project. A commercial firm utilizing SRA and other materials will attempt to raise the reading and mathematics level of 9th and 10th grade potential dropouts one full grade level in 80 hours of class time. Payment to this firm is subject to the success of their program.

According to the most recent figures available from the National Education Association 41.3 per cent of the school districts in the United States enrolling 25,000 or more pupils have special classes for potential drop-outs. Evening schools with special classes designed to appeal to the potential dropout are provided in 3.7 per cent of the school districts in the United States. The larger the school district the more common are such programs.

In the Dakotas, there does not appear to be any formal program for alienated youth. Attention specifically for alienated youth is confined to counseling when such services are available. Vocational programs in the high schools which provide terminal education are considered by school officials to



## 5.7

also be programs for the potential drop-out. Therefore, programs for alienated youth might be considered as in existence in a few larger districts though they are in the form of terminal education courses. Refer to the section on vocational programs for further data concerning terminal education courses.

Academically Talented Programs for the academically talented are provided in 22.1 per cent of the schools enrolling 300 or more pupils according to the most recent National Education Association figures. The National Education Association's Educational Policies Commission in 1960 identified the gifted student as an area of critical concern. As anticipated, the larger the district the more likely is there to be such a program.

Concern for the academically talented and the lack of quality education on our side of the Atlantic Ocean was especially voiced by men such as Admiral Rickover, given impetus by Sputnik, and enchantment with the intellectuals who led in the United States' development of atomic energy.

One example of programs for the academically talented is the provision for students to work on their own. Provisions for independent study, on a national level, are provided for in 4.5 per cent of the elementary schools and in 13 per cent of the secondary schools.

Other programs for the gifted have been largely concerned with supplementary learning centers, utilization of team teaching and similar instructional techniques rather than the adjustment or the creation of special curriculums for these students. This may be the reason for the concern shown by the public. These techniques are also available for the benefit of all students in many schools and so do not stand as special provisions just for those students with special and unique academic abilities.

## 5.8

Emphasis on the academically talented student has taken a different direction since 1963. Since that time, the emphasis and research have been on investigating and developing creativity in the above-average student.

In North Dakota, programs for the academically talented take a number of forms. The most common arrangement, and that which is found in many schools regardless of size, is the simple expedient of naming certain courses as being suitable for students with above average academic ability. This includes such courses as foreign languages, advanced mathematics, chemistry, and physics. Students are free to select such courses, or they are directed to do so through the counseling of parents and school personnel. These courses must be considered as part of the program for the academically talented though it is a limited approach to meeting the unique needs of these students.

Quite common are arrangements which permit academically talented students to be excused from certain examinations and assignments. Another common pattern is that of providing a "program" by grouping such students into their own class sections. This may be arranged by the staff in order to provide homogeneous grouping, but it also occurs automatically through student selection of courses.

There will be found in the larger school districts in North Dakota and, to a limited extent in smaller districts, instructional techniques designed to individualize instruction and so permit academically talented, as well as other students, to adapt the basic curriculum to their own special abilities. This is accomplished through such instructional techniques as flexible scheduling, contracts, and team teaching.

Educators in virtually every school in North Dakota feels that they have some type of program or provision for the academically talented.

## 5.9

Provisions, if not programs, are found in both elementary and secondary schools of North Dakota. Homogeneous grouping in the elementary schools for the purpose of reading instruction is a practice of long standing. Such grouping has been extended to other areas of the curriculum in many North Dakota elementary schools. An expansion of this is the non-graded elementary or primary school.

The advantages of such programs to children certainly has not been lost on parents. A number of school officials state that such influences encouraged the adaptation of a non-graded type of instruction in the secondary schools.

Students Terminating Their Education This is an area in which schools appear to be offering a number of courses as well as full-fledged programs. There is a wide range of offerings here from merely having courses which are designed to offer the student the rudiments of a salable skill to offering extensive involvement in the business and industrial communities.

According to the most recently available National Education Association figures, 23 per cent of the school systems enrolling 300 or more pupils in the high school offer some type of school-job coordination in courses identified as providing a terminal education. These range from office training to computer programming. The emphasis appears to be on those jobs which do not demand a high level of mental or physical skill, preparation, or aptitude.

In North Dakota, programs for students terminating their education upon graduation from the twelfth grade are usually also intended to hold students who would be dropping out prior to that time.

A statement in the Biennial Report issued by the Superintendent of Public Instruction, declares that vocational education is to provide skills for home-making and for working in a democracy.

## 5.10

In North Dakota, vocational education has been approved in twelve different areas by the Department of Public Instruction. The majority of courses are found in business and office education. The extent to which these courses are used only for terminal education is difficult, if not impossible, to determine because of the "vocational" courses are taken by students for other reasons. Typing is quite often taken by a college-bound student who wants to be able to type term papers. In schools with limited enrollment there is lack of sufficient courses to provide much choice for the students. In addition, high schools also exist to offer students the opportunity to explore possible areas of studies as well as vocational preparation. Thus, enrollment figures for vocational courses in North Dakota can not give a true picture of the extent to which these courses are providing their intended and principal service.

Educationally Disadvantaged Interest in the educationally disadvantaged is of rather recent vintage. Ten years ago it was not listed as one of the areas of concern by the National Education Association in a 1960 publication on issues and problems in education.

According to the most recently available National Education Association figures, 24.4 per cent of the large school systems in the United States have special provisions for the educationally disadvantaged. These special provisions may be a special curriculum or classes for slow learners who are too old for the elementary school. The larger the school district the more apt are they to offer such programs.

Educationally disadvantaged students who are so categorized because of mental retardation have special programs provided in 87.5 per cent of the elementary schools and in 52.5 per cent of the secondary schools where district enrollments exceed 300 pupils.

## 5.11

Educationally disadvantaged students who are so categorized because of emotional disturbances or social maladjustment, have special programs in 39.8 per cent of the elementary schools and in 39.3 per cent of the secondary schools.

In North Dakota there is no listing of programs in the Biennial Report of the Superintendent of Public Instruction as specifically for the educationally disadvantaged. Nor does this publication list personnel who would be involved in such programs.

Educationally disadvantaged students could be defined as those young people who are not part of the mainstream of the society in which they reside. This would then encompass the Indian population of the state. Reports issued by the State Department of Public Instruction do not indicate any special programs for Indian youth. Average daily attendance and holding power are the only means readily available to determine the extent to which programs for Indians are meeting the needs of Indian children.

According to the latest biennial report, average daily attendance for Indian children is 80.38 per cent as compared to 96.71 per cent for the state as a whole. The most recent figures for North Dakota from the biennial report on education shows 11,390 eighth grade graduates and 9,748 twelfth grade graduates. For the Indian population, there were 99 eighth graders (94 under the Johnson-O'Malley Program) and 35 twelfth graders. This means that for the state as a whole, 86.02 per cent of the eighth graders go on to finish high school. For the Indian students, only 37.23 per cent of those finishing eighth grade went on to complete the twelfth grade. These figures do not include the same students, but enrollment figures for both groups were very similar over the preceding four year period. This would tend to indicate that there is a definite need to better meet the needs of the educationally disadvantaged children who are Indian.

## 5.12

Educationally disadvantaged children receive special programs to a limited extent in North Dakota, but mainly in the larger school districts. Special education classes are found in larger districts such as Grand Forks and Fargo, but an expansion of the program is severely limited by the lack of trained personnel.

Average Pupils In "The Comprehensive High School," James B. Conant states that schools are generally geared for the hypothetical average student. The preceding statement is true, in a manner of speaking. Schools generally are geared for the average student but without such being a specific and planned program as can be found in the case of the educationally disadvantaged, the physically handicapped, or those with emotional problems.

There are no data available on the number of programs specifically designed for the average student. There are, however, examples of programs designed for such students. The National Education Association has reported 369 examples of such programs which are found among 149 school systems of various sizes throughout the United States. All of the programs are classified as "enrichment" and are offered during the summer months.

Provision for additional study time at school, with an indication that this was for the benefit of the average student, was reported in 8.5 per cent of the districts having 300 or more students. Saturday morning enrichment classes for such students were reported by 3.4 per cent of the same districts.

Various publications dealing with crucial issues or with planning for improved education do not include any specific references as to the provision of programs for average students. Reference to such programs are, at best, statements to the effect of increasing the basic strengths of an educational system.

### 5.13

In North Dakota, there is no evidence that school systems have provided specific and unique programs for average students. There are some districts which have instituted programs designed to better meet the needs of all students. School administrators do refer to these as programs for average students, but the writer does not feel it is justifiable to so categorize them. They are, instead, programs designed to better meet the needs of all students whether they are academically talented, educationally disadvantaged, or somewhere in the vast central locus referred to as average.

There have been virtually no feature articles in the newspapers or in the popular magazines attempting to arouse the public's interest or concern with the average student.

Recommendations Of the five areas dealt with in this section, it appears that the most critical need is that of meeting the needs of the "Average Student."

Through specially funded programs, a relatively great effort has been directed towards the students who lack the mental ability or social encouragement to continue through twelve years of schooling.

The vast majority of young people fall into the broad category of being average and because of this broad categorization, their individual needs have largely been ignored. The very size and complexity of this group creates a difficult situation because "average" denotes a large grouping rather than a particular student with particular educational, vocational, or social goals. It is this student, more than any other, who requires the breadth of a diversified program which is available for exploratory purposes as well as for study in depth. It may be through the lack of a suitable program in this area that some students are forced into the alienated or terminal groupings.

Attention to the Average Student offers a bonus of potentially reducing the number of students in other areas and thus helping to resolve those problems as well as meeting the need of the large number of young people called "average."

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# PROGRAMS FOR STUDENTS WITH LEARNING DISABILITIES

Author: Dr. Steven D. Harlow  
 Director, Division of Behavioral  
 Disabilities and Human Development  
 Reactor: Mr. Vernon F. Harmeson  
 Formerly Superintendent  
 Velva (N.D.) School District

## EDUCATIONAL NEEDS COVERED IN THIS REPORT

Program for Slow Learners  
 Program for Mentally Handicapped  
 Program for Emotionally Disturbed  
 Special Education Teacher for the Retarded

Teachers included in the pilot assessment identified the slow learner, the mentally handicapped, and the retarded students as primary concerns. For the purposes of this report, two of the labels, the mentally handicapped and the mentally retarded, will be viewed as synonyms; that is, referring to learning problems that are caused by moderate or severe intellectual limitations. A distinction between the retarded and the slow learner is made in professional literature. "Slow learner" may refer to a child with a learning disability which is not intellectual in its nature or origin, but rather describes some degree of neurological impairment (See Kephart, Frostig). Another common professional definition of "slow learner" is quite different than the preceding one in that the "slow learner" is defined as intellectually limited but possessing a measured intelligence above the retarded level and lower than the bottom limit of the average category. It is the latter definition that will be used in this report. Teachers generally are not aware of such distinctions in definition and use the term instead to refer to any child whose learning problems are due to intellectual impairment. Accordingly, teachers sometimes do not differentiate the relatively higher intellectually functioning slow learner from the lower functioning retardate.

Programs The slow learner's intellectual limitations are not so severe that a segregated class is required at the elementary and junior high. Moreover, because of differences in readiness, abilities, and interests differential instruction within the regular room is necessary. At the high school level it becomes essential that a vocationally oriented program be available (Johnson). Within the State of North Dakota, little thrust has been generated in this direction. High schools predominantly emphasize college preparation, while alternatives are just watered down versions of the college preparatory curriculum. Since slow learners comprise twenty per cent of the school age population, it is incumbent upon the schools to realize their responsibility to this large group.

In contrast to the slow learners, the retarded are generally educated in segregated special classes. The retarded have been given increasing attention by the schools in North Dakota. Progress in meeting their educational needs within the state is apparent. At the start of the 1969-70 school year, 107 special classes for the retarded were provided by the North Dakota public schools. Of this number, 8 were specifically for the more severely impaired trainable mentally retarded student; the remaining 99 classes are designated for the educable mentally retarded. (This does not mean that trainable retarded students would not be found in classes for the educable retarded.) Seven school systems have high school programs for the educable retarded.

Recommendations The slow learner not eligible for the special classes of the retarded and yet finding the regular classroom alien to his interest, abilities, and needs is the forgotten student in North Dakota. Therefore, this investigator submits that the most crucial problem facing those involved in North

Dakota education is to produce a meaningful program for the slow learner. In line with this, three recommendations concerning the slow learner are given:

1. The direction of the program at the high school level should be to train and encourage skills which will allow successful vocational adjustment.

2. Slow learners should be educated within the regular classroom at the elementary school level. Teachers must make adjustments and provisions in both materials and approach to reach these children who generally find school frustrating and meaningless.

3. Closely related to the above is the important point that most teachers are presently not adequately equipped to deal with slow learners. Accordingly, steps must be taken to bring to the attention of the teacher a proper orientation for the slow learner. Teacher preparation programs at the college level must emphasize that the slow learner and other children with special problems are as much the responsibility of the teacher as the average and bright child. Moreover, teacher preparation programs must better aid the future teacher in individualizing instruction. Workshops for teachers should be interspersed throughout the school year. The workshops should be very practical in their substance and staffed by effective teachers and other relevant professionals.

Two recommendations concerning the education of the retarded child in the public schools in North Dakota are offered:

1. More school facilities should be available for the education of the trainable retarded. Three proposals are offered. Since the three are not mutually exclusive, combinations of the three proposals would seem in

order; first, the creation of additional classes specifically for the trainable retarded youngster; second, school support and cooperation with community programs for the trainable retardate. Thus, where community programs exist, schools would supplement and complement them; where they do not, schools would provide the initiative in creating them; third, classes that are now designated for educable mentally retarded students could be enlarged in their scope to include certain higher functioning trainable youngsters. It might, indeed, be worth considering a redefinition of the special room for the retarded. The I.Q. range for eligibility might effectively be reduced to 40 to 65 (contrasted with the prevailing range of 50 to 75 or 80). Dunn has submitted that segregating in special classes children with IQ's of from 65 to 80 is a harmful practice. Accordingly, if the IQ range were lowered, the needs of the child at the upper level of the educable retarded category would better be met in the regular room (with modifications similar to those suggested in the preceding discussion of the slow learner) and a great per cent of trainable youngsters would be eligible for existing special classes.

2. The direction of the larger school systems of providing high school programs for the educable retarded student is encouraging. It will never be feasible to have high school programs in more than just the ten largest systems of the state. Therefore, cooperative arrangements between small and large systems must be sought so that educable students in smaller districts may complete their schooling by participating in the high school program of the closest large school system.

Programs Two schools of thought exist on the desirability of special segregated classes for the emotionally disturbed student in the public schools. Hewett,

Haring and Phillips have advocated the establishment of such special classes. The preponderance of professional opinion, however, is to include the disturbed student in the regular classroom activities while providing him with additional professional assistance. This assistance may be a clinical teacher, learning disabilities teacher, or guidance counselor. The professional may work with the child for a fixed period of time every day, the entire day for a certain number of weeks, or whenever a crisis develops in the regular classroom. Within the North Dakota public schools where provisions exist for the emotionally disturbed child, professional assistance to the regular teacher approach is employed exclusively.

Only four public school systems within the state have employed professional resource personnel for the emotionally disturbed student. These are Bismarck, Fargo, Grand Forks, and Devil's Lake. Upper De Lacs Elementary Guidance Center at Bowbells provides a consulting learning disabilities teacher to several school districts. The Upper Red River Valley Educational Service Center performs a similar function for parts of eastern North Dakota.

Recommendations and Conclusion The existing school programs, and provisions for the disturbed child, within the state are meager and insufficient. Only four districts in North Dakota have started programs. The direction of utilizing trained professionals to aid the regular classroom teacher is sound. Two recommendations are offered:

1. Teachers have great need of learning appropriate ways of helping the disturbed child learn and control his behavior. Similar to a recommendation submitted for the slow learner, college teacher preparation programs

must acquaint future teachers with an orientation to the education of the disturbed student. Teachers throughout the state should have frequent workshops available to them during the school year. Consideration of general approaches, principles, and materials would be a function of workshops. Along with this, however, would be the opportunity for the teacher to constructively discuss a problem child with other professionals.

2. The severe shortage of learning disabilities teachers, clinical teachers, and elementary guidance workers is an impairing element in developing programs for the disturbed child. The selection of outstanding teachers within a district, who then would attend a university to receive graduate training in one of the above disciplines, would seem the most reasonable approach to overcoming the shortage of personnel.

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## COUNSELING AND GUIDANCE SERVICES

Author: Dr. Eldon Gade  
Professor, Department of  
Counseling and Guidance  
Reactor: Dr. John Tieglund  
Assoc. Professor of Education  
North Dakota State University

## EDUCATIONAL NEEDS COVERED IN THIS REPORT

Personal Counseling  
Educational-Vocational Guidance  
Junior High School Guidance Service  
Advisory Services to Teacher for  
Student Group Counseling  
Post-Graduation Employment Specialist  
Elementary School Guidance Services

Overview Any study designed to assess the critical nature of educational needs by use of a paper and pencil ranking procedure for checking various items as services that may be needed by students of a school district may, by its very format, create an impression that these various services are separate entities, not interdependent and interrelated. Thus, in the area of Counseling and Psychological Services, several of the need statements ranked crucial by the students are not as atomistic or independent as they appear. Rather, they are logically and pragmatically part of a larger cluster of services or, perhaps, a part of broader categories. Where possible, for better understanding and articulation, separate need statements were combined and discussed as aspects of broader service clusters in this report.

The services ranked by the students as most needed by school students can be logically grouped into two clusters. One cluster or factor might be labeled specific guidance activities and consists of personal counseling, educational-vocational guidance, advisory services to teachers

## 5.22

for student problems, group counseling, and the position of post-graduate employment specialist. The other cluster represents the educational level at which guidance services are offered as reflected by junior high school guidance services and elementary school guidance services.

### GENERAL REASONS FOR CRITICAL NEED OF "SPECIFIC GUIDANCE ACTIVITIES"

Personal Counseling The student ranking of 3 for this item may reflect a current feeling that school counseling in North Dakota should, but may not be, focused upon the individual problems and needs of the school pupils. Modern life has been characterized as one of conflict, anxiety, and uncertainty. Students need to have a counselor who can help them develop self-understanding, self-realization, and self-direction. The counseling process has too often been carried on at impersonal, objective, and intellectual levels while the ranking of this item suggests that the counseling interplay should include more counseling focused at personal, subjective, and affective levels. The ranking of this item may indicate that the counseling services presently provided by North Dakota counselors focuses upon other domains, or that, among all of the guidance services, time spent in personal counseling is more minimal than desired. The students may be indicating that the underlying philosophy of guidance as practiced in North Dakota schools is to provide formal educational planning and scheduling and vocational information that is not integrated in the counseling process in a personalized way or is not incorporated into the self-concept or life style of the counselee.

Educational-Vocational Guidance That educational-vocational guidance is a concern of students can be inferred from the ranking of 4. The structure of the



world of work is changing rapidly and the educational requirements for job placement are also increasing. A problem of North Dakota youth is that as the farm opportunities decrease, future needs will have to be found in nonagricultural fields and probably in urban localities. The high priority reflected by their ranking may indicate that occupational and educational dissemination procedures are also inadequate. What may be needed is more personalized, more relevant, educational and occupational services.

Advisory Services to Teacher for Student Problems Guidance is focused on assisting not only pupils but also teachers and others. Through the various guidance activities, teachers can benefit from more objective data by better understanding their pupils. Understanding pupil behavior and pupil progress provides for more effective pupil learning. Guidance can contribute to the development of more "professional" teacher attitudes as it relates to an understanding of human development and the principles of positive mental health in the classroom. As guidance programs have developed in North Dakota, counselors have become specialists and often they have not demonstrated the concept of teamwork with the school staff. Teachers complain that although they refer students for counseling and other guidance services, they do not receive feedback and advice from the counselors in an operational form which can be readily translated by the classroom teacher into purposeful action.

A school guidance program which has school-wide impact involves sharing understandings among all school personnel. Advisory services to teachers about student development should assume high priority in any counselor's repertoire of activities because direct manipulation of a student's learning environment is seldom controlled by that counselor. Rather, if positive environmental changes

do occur, they are likely to be more often the product of purposeful action taken by a combination of several adults and student peers. Furthermore, advisory relationships provide a learning experience for all participants.

Group Counseling Increasingly, the therapeutic model of group counseling is being recognized as a potent change technique. Peer power can be channeled through the vehicle of group counseling to form an important persuasive technique, to facilitate adolescent exploration, and for consensual validation in the areas of values and decision-making. Group counseling is becoming a popular therapeutic technique for adolescents because it permits them to think out problems and validate their solutions with a minimum of adult leader interference. Yet, counselors need special skills and attitudinal approaches if they lead adolescent counselees in the group process. Sensitivity training, leadership practice, and small group discussion techniques are all popular today and are being incorporated in school guidance programs.

Most school counselors in North Dakota do engage in group activities, but too often these group activities are not group counseling. The critical need for group counseling, as reflected by the ranking of this item, indicates that the students may want and yet are not experiencing this process, or that group procedures where practiced are not carried out from a humanistic philosophical base or with the interpersonal skills needed to be effective.

Post-Graduate Employment Specialist This subrole of the school counselor usually takes the form of engaging in the placement service. Placement activities include the informational services of educational and occupational planning, pupil appraisal, and counseling assistance appropriate to the students' choices for employment. This service entails giving pupils and parents an understanding

of the procedures for making applications and financial plans for attending educational or training institutions in preparation for employment placement as well as assisting those youth who are planning to seek entry employment requiring no prerequisite post-graduate training. In most school settings, the counselor serves as a generalist and performs this service as part of his activities; however, in some of the larger schools in North Dakota and elsewhere, secondary school counselors do concentrate or specialize in the placement function. The student ranking of 18 indicates that (along with the 4th ranking of educational-vocational guidance) the respondents show a concern that the educational-vocational service be provided in a significant way in the schools. This high priority underscores the agrarian North Dakota students' uneasiness about his vocational future in the rapidly diminishing agricultural occupations and his general concern about vocational placement.

#### GENERAL REASONS FOR CRITICAL NEED OF "LEVELS OF GUIDANCE SERVICE"

Junior High School Guidance Service The period covering the junior high school is one of transitional physiological and psychological change. The curriculum of the junior high school is based upon broader exploration in preparation for decision-making and the beginning of a narrowing of vocational interests. The junior high school guidance program is at a crucial point in the developmental sequence of child growth. Career development theorists have pointed out the vocational immaturity of junior high school students and the consequent need for continued vocational exploration facilitated by an integrated guidance program. Likewise, the child development theorists have shown that the accelerated physical and psychological growth at this period create "problems" for young adolescents, and help is needed in the form of guidance services at this point.

Too often, as guidance services are practiced in North Dakota, the high school student receives priority and any time left over is given to the junior high school student. The high priority ranking of 7 indicates that the students probably want more and better guidance services at the junior high school level.

Elementary School Guidance Service A current model of guidance services is based upon the developmental approach. Under this model, guidance services are viewed as continuous throughout the school system and geared to the developmental stages of the pupils. The elementary school period is viewed as very important if a preventive approach to problems is to be achieved. Guidance services are needed at the elementary school level and presently this is one of the fastest growing areas of guidance services. However, most school systems in North Dakota have started guidance at the high school, and then moved slowly downward. Many specialists now believe that it would be more logical and effective to have guidance services at the elementary school level first, and then extend upward to the higher grades.

#### STATUS AND COMPARISON OF "SPECIFIC GUIDANCE ACTIVITIES"

This factor, or cluster of problems, reflects the type or emphasis of guidance services offered.

All counselors place varying emphasis upon job aspects. A report of NDEA Title V-A, School Counselors in North Dakota for January, 1966, showed that only 13 per cent of the pupils interviewed had primarily a personal-social problem, while 69 per cent had primarily an educational problem, and 18 per cent primarily a vocational problem. In terms of time devoted to various activities, the report showed that 58 per cent of the counselor's time was devoted to counseling, only 11 per cent of their time to group guidance and orientation, and

the remaining time (31 per cent) to organization and administration of the program. The study further indicated that of the number of school conferences held, 34 per cent of them were teacher conferences about pupils.

Some of the data just reported seems to support the rankings of concerns while other data do not seem to support the needs statements.

For example, personal counseling did not appear to be a primary category of counseling focus, while educational counseling did. Likewise, vocational counseling was not a major focus. Thus, it would appear that more personal-social counseling and vocational counseling might take place but not necessarily more educational guidance. The data did seem to indicate that counselors are not spending much of their total time (11 per cent) in group guidance (counseling) and orientation. The needs priority may reflect this lack of emphasis.

Advisory services to teacher for student problems had a high priority rating. The data cited indicated that 34 per cent of all the types of conferences held during that period were with teachers about pupils. The rating of this area as a serious problem may not be related to the number of the conferences but rather, perhaps, to the content of the conferences and to the degree that the information shared with the teacher is operational and useful to the teachers.

#### STATUS AND COMPARISON OF "LEVELS OF GUIDANCE SERVICE"

Elementary & Junior High School Guidance Service For as long as there have been data collected, there has been a shortage of counselors. This shortage has been especially acute at the elementary school level. For example, the U.S. Office of Education reports (1965) that fulltime and parttime counselors in public secondary schools in the nation was 42,124 with a counselor-to-student ratio of 1 to

505. While in the same period only 2,081 counselors were employed in the elementary schools for a ratio of 1 counselor to 19,317 students. Another U.S. Office estimate shows that the demand for counselors under continuation of current conditions and on current basis is for an increased need of from 2,500 to 26,987 elementary school counselors.

In Wyoming in 1965, there were 44 fulltime counselors employed for a counselor-to-student ratio of 1 to 672. In Minnesota in 1965, 614 fulltime counseling personnel were employed in secondary schools for a counselor-to-student ratio of 1 to 557. In South Dakota the ratio was 1 to 697, while in North Dakota, for a comparable period, the number of fulltime equivalent counselors was 61 for a ratio of 912 students to one counselor. In Minnesota, as well as in North Dakota, no elementary school counselors were reported as employed during 1965.

The 1968-69 Directory of North Dakota Guidance Personnel, Department of Public Instruction, indicates that 12.5 fulltime equivalent counselors were employed specifically in junior high settings while 11.5 fulltime equivalent counselors were employed specifically in elementary schools. These figures compare with 91 fulltime equivalents at the secondary school (high school level).

In terms of percentages, only 11 per cent of all counselors in North Dakota were in junior high school settings and 10 per cent in elementary school settings. Yet, in Wyoming for 1969, 47 of the 311 elementary schools had an organized guidance program for a 15 percent coverage. In general, the employment of a school counselor is necessary for an organized guidance program to function at this level. It would appear in North Dakota that guidance services are not proportionately offered at the elementary and junior high school levels. And herein lies a possible reason for the ranking of these items as a concern.

## 5.29

Perhaps students, parents, and educators want organized guidance services at these levels and they are not being adequately provided. According to the developmental model of guidance services, all educational levels should have organized guidance services carefully geared to the peculiar and unique developmental needs of that particular level. Although data are not fully available, it is felt that in neighboring states, as well as nationally, guidance services are not provided either at the junior high school and elementary school in the proportions needed. Yet, North Dakota services do appear more inadequate than the other states noted. From a preventive problem standpoint, many believe that guidance services should first be provided at the lower and middle grades and less in high school. However, historically, because of the vocational guidance emphasis of early guidance programs, guidance services began at the high school and were provided downward to the junior high school and elementary schools at a much later date.

### INTERPRETATION

Although comparable data are inadequate at times, it does appear that, in general, North Dakota youth at the elementary school and junior high school do not have the services of organized guidance in the proportion received by youth in Minnesota, Wyoming, or South Dakota. It is suggested that these two needs represent critical areas, especially the elementary school guidance service. This interpretation of cruciality is based upon the mental health model of early, preventive intervention.

Professional counselors and counselor educators know that you cannot, in reality, separate counseling and guidance services into the five need statements shown in this study. For example, many personal counseling or group counseling sessions also include educational-vocational problems.

### 5.30

Of the five services noted in this study as critical, in my opinion, educational-vocational guidance is the most critical, with advisory services to teachers for student problems the next most critical. Most North Dakota communities are sender communities, forced to send their youth to other areas for vocational employment. The rapidly diminishing agricultural field forces many North Dakota school youth to prepare psychologically to move away from their community and to educationally prepare for other employment. The major thrust of guidance services at the high school level in North Dakota should be on personalized educational-vocational guidance activities. Many of our school counselors are faced with inadequate vocational and educational guidance materials and are doing an inadequate job of disseminating these materials, including vocational interest and aptitude test data. Furthermore, our counselors are not integrating vocational-educational data in the decision-making counseling sessions.

North Dakota school counselors must show more professionalism in their relationship with the classroom teachers. Counselors need to involve the classroom teacher as a part of the professional guidance team. This area is so crucial because counselors alone have little impact upon youth lives when compared to the collective impact of teachers, the administration, and parents. Only if classroom teachers receive useful information from counselors about youths' problems which can facilitate their teaching style and their interplay with these young people can maximal guidance services be developed.

In summary, the following needs might be ranked as most critical: (1) educational-vocational guidance, (2) elementary school guidance services, (3) advisory services to teachers for student problems, and (4) personal counseling.



CURRICULUM AREAS FOR K - 12 EDUCATION

Author: Dr. Richard Landry  
Assistant Professor of Education

Dr. Clyde Morris  
Director, Division of Educational  
Administration

Reactor: Dr. Ervin Behsman  
Director, Secondary Education

EDUCATIONAL NEEDS COVERED IN THIS REPORT

Foreign Languages  
Fine Arts  
Language Arts  
Science  
Mathematics  
Practical Arts

The secondary school curriculum has become a major concern in the operative structure of our school systems. In recent years there has been much controversy as to the curriculum content and curriculum pattern most effective in the education of adolescents. Since no national curriculum exists, the individual states have been involved in weighing the desirability of changes in the school program as suggested by a constantly evolving social structure. North Dakota is presently in such a situation of self-evaluation. Here our concern involves, specifically, the curriculum of the secondary schools and more specifically the content areas of foreign language, fine arts, language arts, science, mathematics, and practical arts; subject matter fields that were rated 5, 21, 22, 26, 27, 28 by the students as most in need of emphasis in our schools.

The investigation will follow this procedure: (1) North Dakota will be contrasted to national figures where available, (2) Offerings in North Dakota high schools will be listed, (3) selected subject areas will be discussed.

## 5.32

An investigation into the requirements for high school graduation among the 50 states led to the following table:

Subject	Number of States Requiring Specific Number of Carnegie Units				Other	None
	4	3	2	1		
English	*21	18	0	0	1	10
Social Studies	1	*9	22	16	0	2
Mathematics	0	0	7	*27	0	16
Science	0	0	*10	24	0	16
Phys. Education	1	0	4	*17	10	18
Fine or Practical Arts	0	0	1	3	0	46

\*The number of required Carnegie units in North Dakota for each subject

In the same study of the nation's high schools, the National Education Association published the following results from a random sampling of 800 or more high schools. This table lists the percentage of school districts with graduation requirement in the various subject fields.

Per Cent of High Schools with  
Requirements in Given Subjects

English	100
Social Studies	99
Mathematics	97
Science	95
Health & Phys. Ed.	63
Home Economics	12
Industrial Arts	7
Vocational Ed.	7
Business Ed.	5
Music	3
Art	3
Driver Ed.	2
Foreign Language	1

Most striking of all was the small percentage of schools which have a requirement in foreign language. From these two tables, a few salient points emerge. Let us assume that 16 Carnegie Units are needed for graduation (This is the case in over 80 per cent of the states). Over half these units are specified by state requirement before the student even decided what curriculum he wants to take. Of the rest, more than half are specified by the particular curriculum chosen, i.e., college, commercial, or other. Thus the student is left with two to four possible electives, assuming that more than this number of elective courses are offered. Thus, the individual student, limited by time and circumstance, often is unable to choose a subject for which he feels a particular need.

Additional data reveal the particular status of North Dakota enrollments in relation to the national average.

COMPARISON OF NATIONAL AND NORTH DAKOTA  
PER CENT OF PUPIL ENROLLMENT, BY SUBJECTS\*

	U.S.	North Dakota
English	93.0	83.0
U. S. History	22.0	19.0
Problems of Democracy	5.2	17.0
Chemistry	7.6	6.0
Physics	5.4	5.0
Geometry	12.8	12.0
Latin	7.8	5.0
German	.8	1.0
Bookkeeping	8.7	10.0
Agriculture	6.7	9.0
Home Economics	24.2	13.0

\*Taken from "A Study of the Program of Secondary Education of the State of North Dakota" by Brooks, Thesis UND, 1961.

Differences seem to arise most often in the academic subject areas with North Dakota being lower than the national figures, and in commercial subject areas with North Dakota being above the national figures. It should be noted, however,

the extremely low percentages in the areas of foreign languages, bookkeeping, agriculture, and home economics, both on the federal and state levels.

Another source of information indicates the average number of courses offered in each subject area in the State of North Dakota. It seems peculiar to talk about the average student in the average high school in this state, but let us do so. He would have hardly any opportunity to do anything in art, vocational education, foreign language, and physical education. He would have little more than one possibility in industrial arts, home economics, and music.

The Mean Number of Courses Offered in  
Each Subject Area in North Dakota\*

English	4.53
Science	3.86
Social Studies	4.80
Mathematics	4.26
Music	2.04
Business Ed.	4.70
Physical Ed.	.97
Home Economics	1.61
Industrial Arts	1.32
Vocational Ed.	.94
Foreign Language	.97
Art	.10

\*Taken from "A Status Study of the Program Offerings of North Dakota Public High Schools During School Year 1965-1966," by E. Garde, Thesis, UND, 1967.

The stress remains in the scientific and social skills and needs with little apparent felt necessity to elaborate upon the terminal student's needs as regards job opportunity, esthetic values, and family life.

More startling and more revealing are the figures released by the North Dakota State Department of Public Instruction indicating, for the year ending June, 1969, the specific courses offered by the state's high schools and

## Business Education

## Foreign Language

enrollments in each course. No school-by-school breakdown is available from these figures, but they reveal the scarcity of course offerings in general.

Two-hundred fourteen high schools are included in the public accredited list. The table indicates the relative status of course availability and student enrollment in North Dakota during the 1968-69 school year, for the general subject of business education. Note that typewriting, offered in 88.3 per cent of the accredited public schools, was taken by 21 per cent of the students, and although bookkeeping is offered in 77 per cent of the schools, enrollment in the course accounts for 11 per cent of the students. About half the schools offer shorthand, but only 4.2 per cent of the students take it. Five other courses each enroll from 2.1 per cent to 4.6 per cent of the students.

Eight other business education courses are reported as being offered in from 2 to 11 schools and collectively account for 2.65 per cent of business education enrollment.

In the other two school class categories, typewriting also holds the most popular position; 87.5 per cent and 100 per cent, respectively, of the non-public accredited and public non-accredited offer the course but nearly twice the proportion of pupils in the non-accredited schools take it as in the other two types of schools.

Note, also that in the non-public accredited schools, seven courses enroll 16.5 per cent of the pupils, while almost 23 per cent take typewriting. Limited course offerings are apparent, in general, even among the accredited schools, but woefully lacking in the others.

Foreign language offerings, in general, are not considered of great importance at present. The table indicates the present status: thirty-four

accredited public schools offer French and 1774, or 3.7 per cent of the students are enrolled. German is offered in 59 accredited public schools and enrolls 5.1 per cent of the students. Spanish enrolls 4.2 per cent of the pupils and is offered in 27 schools.

The college preparatory orientation of the accredited non-public schools is obvious from the fact that half of them offer French and enroll 11.7 per cent of their pupils; 31 per cent offer German (enrolling 8.3 per cent), 10 offer Latin and enroll 6.5 per cent, while seven offer Spanish which enrolls 43.8 per cent of the students.

By contrast, the public non-accredited schools offer little modern language. Seven schools offer French, 5 offer German, 2 offer Latin and 4 offer Spanish. About 5½ per cent of the students get French, German and Latin, while 3-4 per cent take Spanish.

Only 35 accredited public schools offered Art - a meager 16.4 per cent. Nine of 16 accredited non-public schools offered art - 56.2 per cent. Enrollments were, respectively 3,418 (7.0 per cent) and 1,03 (8.2 per cent). In the public non-accredited schools, only one offered art. The course enrolled 26 students, .9 per cent of the total. This subject ranked 21 in the needs study.

In the field of music, surprisingly enough, only 176 of 214 accredited public schools offer instrumental music, but there are 10,004 students involved - 20.6 per cent. One hundred seventy-two schools offer vocal music and enroll 26.6 per cent of the students. Eight schools offer theory and 5 offer music appreciation for 0.5 per cent and 0.2 per cent enrollment, respectively.

The music programs of the accredited non-public schools include 9 which offer instrumental and 14 which provide vocal music - 56.2 and 87.5 per cent respectively. Music theory and appreciation is offered at the non-public

accredited and public non-accredited levels with anticipated infrequency and involve, in each case, 1 and 3.1 per cent of the students, respectively.

For purposes of the needs assessment study, art and music were included in Fine Arts, and the general subject was rated 21 by students as needing emphasis. It must be noted that modern language was rated at a much higher level of need (5th) at least in part because of its consideration as a necessity for college, while music and art are not so considered.

The average number of language arts courses offered by the various schools ranges from 3 in the smaller schools to almost 8 in the largest schools. The average number of courses increases generally as the size of the district increases. Not all schools, however, offer all 4 years at the same time. It is common practice among small high schools to offer courses on an alternating year basis. As regards reading, few schools had any remedial reading program and only 6 per cent had a developmental reading program.

The feeling of the students seems to be that what they are presently getting is not enough or is not good enough. It is a strong indictment against the language arts curriculum that no data have been found as to any experimental or innovative approaches toward this subject area as are found in some other parts of the country.

Aside from the standard four years of English required of all schools, the balance of offerings includes, in the accredited public schools, only 10.8 per cent of the students (six various courses are included, with speech being the most popular, for 81 schools offer it and over 1800 (3.8 per cent) students are enrolled. In the accredited non-public schools, 12.6 per cent of the students are enrolled in the six other courses. Again, speech is most popular, for it is given in ten schools and enrolls almost 7 per cent of the students.



In the public non-accredited schools, no advanced English is offered at all, nor is there a course in developmental reading. Speech accounts for nearly 9 per cent of the enrollment in the other courses.

The high schools of North Dakota offer, on an average, 3.1 courses in the natural sciences. Eighty-three per cent of the schools offer biology, and approximately 10 per cent of the biology students in the state are involved in BSCS courses under one version or another. However, CHEM study for chemistry involves less than 15 per cent of the students and the PSSC program in physics is only scattered here and there. It seems then that although the science teacher of today has at his command a tremendous choice of equipment, materials, and approaches from which to pick and choose, these approaches still lack momentum here. Although ten per cent of the biology students are involved in the new program, less than six per cent of our schools fall in this category. The same results occur with the other programs. Again, it may be the student at the smaller high school who is subjected to the traditional and feels neglected.

In math, 92 per cent of the schools offer Algebra I, 66 per cent Geometry, and 62 per cent Algebra II. In the state, the large schools offer courses up to calculus and the smaller schools struggle to offer Algebra II. Even with the impetus that the math programs have received from certain federal programs, the most common offerings in North Dakota are still the familiar courses of General Math and Algebra I.

Practical Arts for our purposes includes industrial arts, agriculture, and home economics. This area was rated 29th. No more than 25 per cent of the state's high schools offered a course in industrial arts. General shop is offered in approximately 25 per cent of the schools, with woodworking, metal-working, and graphic arts hardly approaching the 1 per cent level. Home

Economics I and II are offered in approximately 47 per cent and 44 per cent, respectively, of the schools, but hardly anything else. As regards vocational agriculture, courses are offered by only a handful of schools (less than 5 per cent) even though the primary industry of North Dakota is agriculture and it is the "most rural state in the Union." The average offering in vocational education is 1.5 courses for a 4 year high school and is a good indication that most of our schools offer primarily a college preparatory curriculum.

Curriculum changes in North Dakota have been slow, and most schools can be classified as traditional in nature. Only the larger schools have shown any inclination toward experimentation. The question is raised as to whether or not this traditional approach can continue to effectively serve the needs of youth, especially in a dynamic social setting. Data relative to the number of teachers employed in the high schools indicate that almost one-half of the state's 275 high schools employ fewer than 5 teachers. Concurrently, 158 accredited high schools employ 73 per cent of all teachers and involve 80 per cent of all students. The per-pupil cost of school operation is considerably higher than average for the small high school and the program is generally inadequate. A comparative study of subjects offered by schools of various accredited and non-accredited levels indicates that the small schools are not attempting, and cannot possibly attempt, to enrich their offerings in the areas of foreign language, home economics, fine arts, industrial arts, and advanced math and science.

James B. Conant in The American High School Today saw the problems of the small school district twenty years ago:

Their instructional program is neither sufficiently broad nor sufficiently challenging. A small high school cannot of its very nature offer a comprehensive curriculum. Furthermore, such a school uses uneconomically the time and efforts of administrators, teachers and specialists, the shortage of whom is a serious national problem.

# FLEXIBILITY IN EDUCATION

Author: Dr. A. W. Sturges  
 Chairman, Department of Education  
 Reactor: Dr. Thomas Jenson  
 Chairman, Division of Education  
 Dickinson (N.D.) State College

## EDUCATIONAL NEEDS COVERED IN THIS REPORT

Individualized Instructional Programs  
 Non-Graded Programs  
 Resource Persons for Use in the Classroom

### Individualized Instructional Programs

1. A number of ingredients are necessary for change to take place. When the proper blend of these ingredients is available, it is possible for a school to launch successful programs to individualize instruction.

Teachers have always expressed concern for the individual student. Recently, students have openly expressed their concern for identity, and have asked the adult world to respond to them as individuals. This has, in my opinion, encouraged teachers to actively search for ways to individualize instruction. There is now available the materials and expertise to make individualized instructional programs possible.

2. Studies by Worner and Hanson have indicated that several schools are involved in a number of activities designed to individualize instruction. A major difficulty, however, is the accurate definition of "individualization" and suitable techniques by which this can take place in a classroom. It is safe to say, however, that although a majority of North Dakota teachers would indicate they are attempting to individualize, probably less than ten per cent are cognizant of what true individualizing really means.

3. To my knowledge, no national norms are available. Studies by Mrdjenovich and others have examined specific kinds of individualizing activities (such as flexible schedules). North Dakota, in my opinion, is probably at a par with other states. All states have both exemplary and reticent schools; North Dakota can probably compare with the best and the worst. A major handicap of North Dakota schools is the limited financial resources of the state, and its geographic isolation.

4. It is my opinion that, generally, North Dakota schools are not as well off as most good schools, but are ahead of some others in attempting to individualize. The area of individualizing instruction is probably critical and should receive special attention.

#### Non-Graded Programs

1. The ultimate individualized program would permit each child to learn as rapidly as possible, unrestricted by any force. This could be referred to as continuous progress, beginning at birth, and ending with death. In a school system, it could cover the curricular content normally found in grades one through twelve. At interim, more conservative attempts to reduce restrictions to learning is "non-grading."

The term "non-grading" holds a number of different meanings for teachers. One school may introduce sixteen levels of reading for the primary grades and refer to it as "non-grading," another school may refer to "basic skills" that encompasses the traditional first three grades. Although teachers cannot agree on the specific meaning of non-grading, its term is used to emphasize a school's concern for improved learning.

2. There is considerable interest in the general area of non-grading; there is little agreement on its definition. A survey conducted by Hendrickson indicates that probably less than five per cent of North Dakota schools even identify their schools as somewhat involved in non-graded programs; it is probable that one per cent is a more accurate figure.

3. Currently, non-grading is not of sufficient interest per se to have stimulated surveys that are restricted to this problem. As in most states (including neighboring states), non-grading is usually found in suburban schools; programs vary markedly from school to school.

4. This is not critical. No national agreement among teachers on the term can be found. According to the available literature, non-grading is an interim process for individualizing instruction.

#### Resource Persons for Use in the Classroom

1. In all teacher education programs, future teachers are reminded of resources in communities, and the importance of utilizing these resources. Increased interest in identifying and using these persons has probably been stimulated by the teacher's felt needs for assistance and lay person's increased involvement in curricular programs.

2. This is not, in the writer's opinion, a critical problem that is felt by large groups of teachers or lay people. Generally, concern is either centered in an individual teacher's search for improved instructional programs or through service centers that can collect and distribute such information. Probably the Upper Midwest Small Schools Project has made more concerted effort than many other agencies in collecting and disseminating information on resource persons.

3. No national norms are known. It is unfortunate that this method of improving instruction has not received much interest.

4. This is not critical at the present time. In the future, increased methods of communication could make a statewide pool of resource persons a practical program.

# PSYCHOLOGICAL SERVICES

Author: Dr. Esther Noll  
Psychologist, Evaluation Center for  
Exceptional Children, Grand Forks

Reactor: Dr. John Noll  
Associate Professor  
Department of Psychology

## EDUCATIONAL NEEDS COVERED IN THIS REPORT

Psychological Testing  
School Psychologist

Psychological testing is regarded as an important and even vital service by most school authorities in their efforts to determine possible reasons for problems which children manifest in the classroom. On the elementary school level, these problems may involve poor academic achievement, intellectual limitations, special learning handicaps, or maladaptive or disruptive behavior which may reflect emotional problems of varying degrees of severity. At a later age, these problems may find even more disturbing expression in anti-social behavior, or a generalized retreat from the academic situation, or a combination of both. Usually, although not always, a teacher's or school administrator's concern about such problems in a child is matched by similar concern on the part of the parents.

The psychological evaluation of children presenting problems has become an accepted step in arriving at an understanding of the problem and at appropriate remedial and treatment plans.

North Dakota has made efforts to meet the need for these services by providing, in cooperation with the counties, 1) the Area Social Service Centers,

which are essentially family service agencies, and of which there are eight located throughout the state; and 2) the Mental Health and Retardation Centers, which are psychiatric clinics, and of which there are four. Psychological services are also offered by the Psychological Services Center at the University of North Dakota and at Minot State College. In addition, the State Department of Health offers the testing services of three psychologists to County Special Education Boards during the three summer months; and the Upper Red River Valley Educational Center, a Title III project now in its third year of funding, has offered these services by sending two psychomotrists to schools in the northeastern counties of the state which do not have easy access to the centers mentioned above.

Currently, there are two school psychologists in the State of North Dakota, one in Bismarck and one in Grand Forks. By contrast, the State of Iowa five years ago reported that 96 psychologists were employed by Special Education Services, serving 477 school districts. At that time, Iowa had approximately 650,000 K-12 students while North Dakota has about twenty per cent of that figure. Thus, Iowa provides a school psychologist for every 6,500 secondary pupils while North Dakota has only one per 65,000 pupils.

These services, while important to the communities which they serve, cannot begin to meet the specific needs of the schools in the communities in which they are located, not to mention schools in the more rural and geographically isolated areas of the state. It seems apparent that these needs will best be met by either one of two plans: 1) arrangements whereby cooperating school systems will have the services of an appropriate number of school psychologists; or 2) the establishment of central Educational Services Centers,



which will provide the services of school psychologists (as well as other resources) to schools.

These school psychologists would be able to provide a much more complete kind of service than the schools are currently able to obtain, because they would be able to devote their total time to the schools they serve. In addition to the psychological testing of children, they could serve other important functions as well: 1) provide consultative services to teachers and administrators, whom the latter would be more likely to avail themselves if the psychologists were frequently and readily accessible; 2) provide an important liaison between school and home, through which the family can be helped to understand the school's efforts with the child, and the school can be helped to gain insight into the child's background; 3) provide preventive services by being able to identify potential problems before they become serious; and 4) fulfill an educative function in providing schools with information about, and insight into, special needs of its students, such as the need for special education classes, remedial classes, etc. It is in these very areas that the schools of this state are critically lacking in services at this time.

548/5.49

## READING AND SPEECH SERVICES

Author: Dr. James Peebles  
Associate Professor  
Department of Education

### EDUCATIONAL NEEDS COVERED IN THIS REPORT

Remedial Reading Specialist  
Speech Therapist

#### Remedial Reading Specialist

The composite rating for the service "Remedial Reading Specialist" was 12 for all services rated. The composite is made up of three sub-ratings including groups of educators, parents and 12th grade students. As in all composite ratings, it is important to examine the contribution of each of the parts to the whole, particularly where great disparities exist between the individual contributors. If this isn't done, the composite rating becomes a meaningless figure falling somewhere between the widely disparate extremes. A wide disparity exists between the raters of this category.

Before examining possible ramifications of the raters of this service category, it would be worthwhile to assess the present status of this service in the State of North Dakota. Since 1960, a marked change has occurred throughout the state in the employment of remedial reading specialists. A State Department survey in 1961 revealed that 254 specialists were employed in this capacity either part or full time. By 1969, over 600 teachers were conducting remedial reading classes under the auspices of Title I alone. Figures were not available for school districts employing specialists through other funding resources. It is important to recognize the fact that remedial reading as a service has had high priority for the past nine or ten years.

One notes the high priority for remedial reading from at least three primary sources. The United States Office of Education has suggested model programs and encouraged school districts to develop reading programs. The State Department of Public Instruction has done a great deal as well through summer workshops for remedial reading teachers and providing consultants to schools. School districts have responded by developing special programs in reading. Over 80 per cent of all Title I projects throughout the state and nation have been special reading programs.

While this category ranked 12th with respect to all raters, the disparity is great between the extremes. Educators placed it 4th in degree of need while 12th grade students ranked it 40th. Parents responding to the questionnaire ranked the need for this service 12th.

In view of statements about the present status of remedial reading service made above, it is not surprising that educators rated it very high in need. A few years ago one could speculate that it would have been rated first by them. It is not surprising that the service falls a bit farther down the line in their estimation now. Two possible explanations for this arise. One is that special programs in reading abound now and the need is being met better than it ever has before. As a consequence, educators can turn attention to other areas of service that are important. At the same time, remedial reading instruction is recognized by most educators as needing continuing emphasis. Secondly, it is probable that some respondents are aware of a trend in the country away from "remedial" kinds of programs to "preventive" programs. In other words, a feeling of need is present to do the job well in the first place and remediation will be unnecessary later.

The much lower rating given this service by students (40th) is understandable. Their ratings reflect needs that they have personally, and few 12th grade students need remedial reading. For the most part, they read well enough to achieve adequately in their academic work. Many students who would rate this service high have already left school by grade 12.

The high rating of parents is perhaps a reflection of various forces at home, in the local community and the nation. Parents who have a child (or children) with reading difficulties, or know relatives or neighbor children with difficulties, recognize the need for special service. Parents may also be impressed by the school through its efforts to provide information about the programs it offers and the need for them. It is certain that media such as newspapers and popular journals have a marked effect on the views of parents. Numerous articles have appeared at regular intervals since Rudolph Flesch's book Why Johnny Can't Read was published in 1955. Many of these articles have been directed at "the reading problem" and why many children don't succeed in learning how to read. As a consequence, the reading parent is more aware of reading disability than ever before.

In the interests of this needs assessment report, it is strongly felt by the writer that cognizance of new priorities in reading education are appropriate. It is interesting that the concept "remedial reading" is the only reading concept dealt with in this survey of needs. Remedial reading is considered by most reading authorities to be a less essential need than other kinds of school reading services, programs, or specialists. The term "services" is limiting with respect to those other needs. Examples of such concepts could include: reading consultant, reading coordinator, secondary school developmental reading, kindergarten (reading readiness), and teacher in service. All are pertinent areas of need with ramifications for improved reading growth for all children.

The emphasis (top priority) on reading at the national level will continue through the 1970's. Commissioner of Education, Allen, has already gone on record to this effect. He has resolved that by 1980 every child will read to the full limits of his capability. He has recommended a total national commitment to achieve this end. The response of the International Reading Association, through its Assistant Executive Secretary, Ronald Mitchell, was laudatory. Mitchell, in reflection, indicated that the greatest need to achieve this goal is in teacher training. The writer is in complete accord with Mitchell, but would add teacher training at all school levels. It should be noted that more remedial reading programs or remedial teachers was not suggested. The inference to be drawn from Mitchell's evaluation of the scene is that effective instruction in the beginning and at each succeeding stage of development will go furthest in eliminating reading disabilities.

#### Speech Therapist

The need for speech therapists and programs for speech improvement have been recognized since 1910 when the Chicago public school system first provided a program for children. The needs assessment inventory finds the speech therapist service with a composite rank of 13 among educators, parents and 12th grade students. The breakdown for each of the three groups, and the rank they give for this service, is as follows: educators, 10th; parents, 18th; and 12th grade students, 35th. The higher priority given by the educator is undoubtedly a result of his recognition of existing problems and his concern for children with speech problems. Speech therapy is considered a branch of the special education division by the State Department of Public Instruction and has been recognized as an area of need since 1953.

While speech therapy was ranked relatively high on the scale of needs, it should be noted that it shares a relationship with other needs given high priority. Speech and hearing disabilities bear causal relationships to poor academic achievement, social and emotional disorders and poor values of self. It should be recognized that certain related needs were given a high ranking by educators, parents, and students alike. These needs include: Program for Slow Learners, Program for Alienated Youth, Personal Counseling, and Remedial Reading Specialists.

Provision of speech therapists for much needed service is often difficult to obtain for North Dakota schools even though three institutions of higher learning in the state train speech therapists. Several delimiting conditions exist. First, only a small percentage of all school-age children require the services of a speech therapist. In small rural schools there may be no children, or just a few, in need of help in a given year. Secondly, great distances separate schools in most areas outside the cities which curtails opportunities for schools sharing therapists. In addition, this expense is great, even on a shared basis, for the smaller schools wishing to employ a specialist. Finally, it is difficult for schools that seek to employ the speech therapist to secure one, for the demand is great and there are more desirable situations available in urban areas.

A national survey of 1961 noted that the majority of speech therapists are needed in the elementary school grades. Over 50 per cent of all respondents indicated that they served 3-6 schools, while 30 per cent served more than six schools. Seventy-five per cent of all "clinicians," this report went on to state, work in kindergarten through grade 2.

It can be conjectured that this service would have been given higher ranking by respondents if more reliable estimates of the extent of speech and hearing difficulties were known. In most schools the teacher alone discovers existing difficulties through informal observational techniques. A formal diagnostic program conducted by a trained specialist would result in recognition of minor difficulties that would otherwise go unobserved. A greater stress on this service would result as a consequence.

## EQUIPMENT, FACILITIES AND PERSONNEL FOR EDUCATION

Author: Dr. Archie Gray  
Professor, Department of Education  
Reactor: Dr. Clyde Morris  
Professor, Department of Education

## EDUCATIONAL NEEDS COVERED IN THIS REPORT

Better Classroom Facilities and Equipment  
More Specialized Personnel  
Better Libraries and Instructional Center  
Facilities and Equipment  
Additional Textbooks and Instructional Supplies

Introduction

In the matter of budgeting, there are several basic problems. Because of such factors as isolation, and the comparatively severe climate, the people of North Dakota have become inured to hardships. They are very self-reliant and wish to be independent. This leads to an attitude of "Make do or do without."

Data which relate to the whole state are misleading because statewide averages do not take cognizance of the disparity among school districts from different areas of the state or different types of communities.

In North Dakota, the sparsity factor is of great importance. There are no especially large centers of population. There is considerable movement from rural to urban communities as well as emigration from the state. There is a great number of small high schools and many school districts do not have secondary schools. In some whole counties there are not enough pupils of high school age to make a secondary school feasible.

The 1967-68 Annual Report of the North Dakota State Department of Public Instruction reported that only fourteen high schools in North Dakota enroll more



than 400 students, and 162 enroll fewer than 100 students. Over 100 school districts maintain high schools with an enrollment of less than 75 students, and of these, 53 have enrollments of under 50.

While some schools are fulfilling their obligations fairly well, or even very well, few districts are able to offer complete programs. In the majority of the small schools, the money available is used to provide very few courses of study for the youth of the area. There are shortages of all kinds of laboratories and special rooms. Equipment and supplies are present in too low quantity and quality.

CURRENT EXPENDITURES FOR FULL-TIME ELEMENTARY  
AND SECONDARY DAY SCHOOLS IN PER CENTS\*

State	Adminis- tration	Instruction	Operation	Maintenance	Fixed Charges	Other School Service
U. S.	4.45	68.61	8.37	2.95	8.07	7.26
N. D.	5.09	65.17	9.64	2.36	5.63	12.07
S. D.	5.03	68.07	8.41	3.34	5.80	8.27
Minn.	4.12	57.24	10.05	2.42	6.68	9.47
Montana	5.60	65.62	8.87	2.94	7.32	9.61

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\*Includes attendance services, health services, pupil transportation, food services and extra curricular activities

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From this table, it may be seen that for the comparatively small schools of North Dakota, that expenditures for operation, administration and other school services are well above the national figures. This means that a smaller proportion is spent for instruction. While only 11 states spend less per pupil ADM than North Dakota, there are only 7 states where a greater per cent of personal income is spent for public elementary and secondary schools. This indicates that the people of North Dakota are making a good effort toward education

Another index of limited resources is revealed from the 1967-68 annual salary figures for the nation. Only three states, Alabama, Mississippi, and South Dakota provided lower salaries for their teachers than did North Dakota.

Too many school boards in North Dakota have not realized that school plant values have appreciated and they have failed to increase insurance proportionately.

The majority of school districts in the state have had to resort to short-term borrowing for current expenses as their working balances have not been sufficient for some parts of the year.

Property valuations vary greatly and the school mileage rates have exceedingly great differences among the districts. Altogether too great a proportion of school support burden is placed on the property tax.

#### Classroom Facilities and Equipment

In general, the classrooms in North Dakota lack adaptability in many respects. Many of North Dakota's school budgets do not offer even minimum educational facilities. While there should be facilities for instructional centers, many materials and pieces of equipment for large and small group and for individualized instruction should be located in the various classrooms.

Of the 312 secondary school buildings in North Dakota surveyed by Ron Torgerson in 1966-67, the following data indicates severe shortages in certain types of facilities.

PER CENTS OF SCHOOLS NOT HAVING:	Libraries	32.7
	Physical Education	39.0
	Special Education	85.3
	Science Laboratories	55.1
	Office Space	18.3
	Hot Lunch Facilities	53.6
	Faculty Work Areas	50.0
	Storage Facilities	25.7

He also indicated that 72 of the 312 schools reported the use of 134 temporary classrooms. These schools had an average of 1.9 temporary classrooms per building. It was also stated that 99 of the 312 buildings were overcrowded.

NUMBER OF ADDITIONAL ROOMS NEEDED TO REDUCE  
MAXIMUM CLASS SIZE TO -

State	Number of Instructional Rooms	25 Elementary	27.4 Elementary	30 Elementary	Overcrowded Rooms
		Pupils/room 20 Secondary Pupils/room	Pupils/room 27.5 Secondary Pupils/room	Pupils/room 30 Secondary Pupils/room	
N. D.	7,300	800	300	200	500
S. D.	8,129	600	200	100	800
Minn.	36,144	3800	1100	500	3200
Mont.	8,195	900	300	200	700

While the North Dakota average of pupils per classroom is but slightly over 20.0, the above table indicates that averages are misleading. Indeed, even with the present total of 7312 classrooms, it would take 800 or more to provide for 25 elementary pupils per room and 20 secondary pupils per room. It is considered that 500 classrooms in North Dakota are overcrowded.

NUMBER OF INSTRUCTION ROOMS

State	Completed During 1966-67	Abandoned During 1966-67	Available and in use, Beginning 1967-68
North Dakota	315	219	7,312
South Dakota	130	100	8,129
Minnesota	2,273	815	36,144
Montana	429	198	8,195

There has been an effort to increase the number of available classrooms in North Dakota. There was a net gain of 96 such rooms in 1966-67, but there

are yet too many rooms in the wrong places and too few where there is overcrowding.

#### Specialized Personnel

There is a great need for more specialized personnel in the following areas: audio-visual supervisor, curriculum coordinator, counselors, librarians, psychologists, social workers, speech therapists, special education, and remedial reading. The situation could be helped to some extent by hiring supervisors and consultants on a cooperative basis by groups of school districts.

There are altogether too few employees capable of teaching or supervising various interests and needs beyond the very basic subjects. Many teachers have their teaching loads in fields for which they are not fully prepared.

Occupational opportunities within the state are restricted. Therefore, our youth must be so educated as to be able to meet competition in other geographical areas. There are needs for new programs, increased capacity of existing programs, more adaptable programs and for vocational counselling.

More attention will not be devoted to this need since it reflects several other needs previously discussed. Among the specific reports to refer to are: Counseling and Guidance, Psychological Services, and Reading and Speech. That this need "More Specialized Services" was highly ranked provides further evidence that respondents in this study felt that the human element is needed to an even greater extent than now provided.

#### Library and Instructional Facilities and Equipment

For the small schools of North Dakota there is great need for the improvement of the school library. There must be greater structural versatility

in order to produce greater efficiency. Schools should make provisions for extensive use of new library technologies for acquiring, storing, presenting and retrieving of materials such as microfilms and audio-tapes. This physical setting should provide for flexibility in individualized and small group instruction.

The following comments are gleaned from work of graduate students, including Joel Davy, Marjorie Gray, and Ron Torgerson, the state librarian, and from personal acquaintance with conditions in many schools of North Dakota. While positive statements could be made about many school libraries, the negative aspects will be considered here.

Too many schools have no librarian, a part-time librarian, or an inadequately prepared librarian. Even the administrator may not realize the importance of the library. Many of the library rooms are small, not easily accessible or open during all school hours. Sometimes the library is a corner of a classroom or room used for other purposes. Ron Torgerson stated in a Master's Thesis in 1967 that in 314 schools there were only 210 library rooms. Nearly half of these were constructed before 1930. There is often poor heating, lighting, or ventilation. Spaces are not available for individual or small group use. There usually is no suitable workroom, or space for film previewing. Many school libraries are not available for community use.

Library equipment may be inadequate; there often are not suitable charging desks or catalog files. The tables and chairs may not fit each size of student. Shelves may be too confined. Usually there are inadequate storage facilities for maps, charts, material for vertical files, films, projectors, etc. There are not enough of various types of projectors for individual use. The duplicating facilities may be inadequate.

While the books may not cover a wide enough range of subjects, they may have too many out-of-date or useless books which should have been weeded out. The reference material may be lacking both in breadth and depth. There are usually too few dictionaries and suitable encyclopedias. While there are some bookmobiles, there is not enough cooperation with other agencies for exchange of travelling libraries.

In general, instructional materials and equipment were stored in the office of the principal or in the library room. Facilities are being improved for storage and use of such materials but are still far from being suitable.

#### Additional Textbooks and Instructional Supplies

In this section we seem to be dealing with traditional educational supplies rather than innovative materials and facilities. Innovative facilities such as audio-visual materials, microfilms, audiotapes, microfiches and equipment are dealt with in the sections on classrooms and libraries.

In North Dakota, it is generally customary for high school pupils or their parents to provide most of the textbooks and much of the educational supplies. It was noted that compared to national norms, too little was expended for instruction in North Dakota. As most of this expenditure was used for salaries, it is evident that there has been too little for instructional supplies of all kinds.

While some use is being made of free or inexpensive materials from various sources, greater use could be made of materials such as paper backs and local resources. Limited budgets compel the continual use of much out-dated material and old texts, but also restrict the variety of resources available.

The single text and anthology-type tome is still the predominant mode in North

Dakota schools. Further restrictions, imposed by limited budgets, are reflected in the lack of materials available for teacher-prepared instructional units, as well as a lack of reproducing equipment of good quality. Teacher loads are such, also, that time is a critical element both in producing classroom material and selecting appropriate items from available sources.

## VOCATIONAL EDUCATION

Author: Dr. Dorothy Grovum  
Assistant Professor  
Department of Business Education

## EDUCATIONAL NEEDS COVERED IN THIS REPORT

Skilled Trades  
Human Services  
Applied Arts  
Electronics  
Agricultural  
Business  
Industrial  
Home Economics

Most of the federal reports pertaining to vocational education list the following vocational education categories: Agriculture, Distributive, Health, Home Economics, Office, Technical, and Trade and Industrial Education. The categories ranked by the students were combined and included in the federal categories. The skilled trades, human services and industrial were included with trade and industrial education. Electronics, depending upon its depth of understanding, may be either technical or trade and industrial. In secondary education it would probably be trade and industrial. Some courses similar to those in trade and industrial education are included in the industrial arts curriculum. In most instances, the emphasis in industrial arts is on general education and not vocational education. The applied arts could be included in industrial arts. Only a few schools in North Dakota offer courses in trade and industrial education. More of the schools offer courses in industrial arts. The course offerings, number of schools, and enrollments in North Dakota for trade and industrial (vocational) education and industrial arts are as follows:



TRADE AND INDUSTRIAL EDUCATION (VOCATIONAL EDUCATION)<sup>1</sup>

<u>Category</u>	<u>Number of Schools</u>	<u>Enrollment</u>
Electronics Technical	1	16
Automotive	4	161
Carpentry	3	138
Drafting	5	148
Electrical	2	158
Industrial Machine Shop	4	41
Printing	1	21
Radio and TV Maintenance	1	25
Sheet Metal	3	108
Small Engine Repair	1	9
Welding	8	126
Machine Shop	1	12

<sup>1</sup>North Dakota, Department of Public Instruction, Sixty-Second Annual Report of the Director of Secondary Education, (Bismarck, Department of Public Instruction, 1969), pp. 27 and 33.

INDUSTRIAL ARTS<sup>1</sup>

<u>Category</u>	<u>Number of Schools</u>	<u>Enrollment</u>
Industrial Arts (general shop)	71	2,110
Mechanical Drawing and Drafting	71	1,866
Woodworking	56	1,527
Metal Working and Welding	30	578
Electricity and Electronics	17	484
Power Mechanics	19	480
Auto Mechanics	11	370
Graphic Arts	5	135
Printing	1	78
Photography	1	15
Home Mechanics	3	25
Plastics	5	62
Crafts	1	6

North Dakota, Department of Public Instruction, Sixty-Second Annual Report of the Director of Secondary Education, (Bismarck, Department of Public Instruction, 1969), pp. 25 and 32.

### Enrollment in Secondary Vocational Education

In comparing the fiscal 1967 total enrollment in vocational education with the total enrollment in secondary education, 29 per cent of the entire enrollment in the states and territories were enrolled in vocational education. (See Figure on following page) Nationally, the largest enrollment was in home economics. This was true for North Dakota as well as for the neighboring states. North Dakota had less than 1 per cent enrollment in trade and industrial education and in distributive education, and a zero enrollment in health and in the technical fields. All of the neighboring states had larger enrollments in trade and industrial education, and Minnesota and Montana had a larger enrollment in distributive education. None of these states had any enrollment in health. In total enrollment in secondary vocational education, Minnesota ranked above the median; and North Dakota, South Dakota, and Montana were in the last quartile (See Figure on following pages). In all of the vocational education areas, North Dakota had a proportionately larger enrollment based on total population than Minnesota, South Dakota, and Montana, except in technical, trade and industrial education. In trade and industrial education, North Dakota was last in the nation.

### Enrollment in Post-Secondary Vocational Education

On the post-secondary level in vocational education, North Dakota was below the national mean and median, whereas the enrollment in Minnesota was in the upper quartile (See Figure on following page). The total enrollment in North Dakota for post-secondary vocational education was proportionately higher than Minnesota, South Dakota, and Montana. None of the four states had an

enrollment in post-secondary home economics. Nationally, the enrollment in post-secondary vocational education is expected to increase by 1.8 per cent from 1967 to 1975.<sup>1</sup>

#### Enrollment in Adult Vocational Education.

In the total enrollment in vocational adult education, Minnesota was in the upper quartile, whereas North Dakota was at the top of the middle 50 per cent (See Figure on following page). South Dakota also had larger total enrollments than North Dakota, Minnesota had a substantially larger proportion of enrollment than North Dakota in all areas of adult education. South Dakota's enrollment was higher in all areas except health, home economics, and technical education. Nationally, enrollment in adult vocational education is expected to increase by 4.7 per cent from 1967 to 1975.<sup>2</sup>

#### Conclusions

While North Dakota is above the national percentage in secondary enrollment in agriculture and home economics, it is below the national percentage in all of the other areas. Particular emphasis should be placed on health, technical, and trade and industrial education. It was in the skilled trades (carpentry, plumbing, electrician, etc.) and in human services (nurse aide, barber, beauticians, etc.) that the students believed more emphasis should be placed. It seems that this need is founded on the lack of adequate course offerings.

Office education, while being below the national percentage, had a larger percentage enrollment than the neighboring states. Office education is

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<sup>1</sup>U. S. Department of Health, Education, and Welfare, Annual Report, Fiscal Year, 1967, Vocational and Technical Education (Washington, D.C.: Government Printing Office, 1969), p. 84.

<sup>2</sup>Ibid.

only one phase of business education. The second phase is the general business education area, consisting of courses such as general business, economics, consumer economics, and business law. General business is taught in 120 of the public high schools in North Dakota; consumer education in 11 and business law in 107.<sup>1</sup> All students need to have general information about business, need to understand the free enterprise system and the economy of North Dakota and the United States. This course, in many instances, has become a workbook course. An exemplary program could be set up for which materials and methods could be developed in this basic business area for the junior high school or secondary student in North Dakota. This type of a program might become an example for the other states to follow in developing understanding about business, industry, farming and the relationship to the economy.

An opportunity needs to be provided for North Dakotans to obtain training in the area of health, technical education, and trade and industrial education. Schools in North Dakota are small, with a median enrollment of 90.<sup>2</sup> A dual enrollment or shared-time type of program could be set up. Students could be simultaneously enrolled in their own high schools and in a vocational high school. They would be bussed to the vocational high school for courses in vocational education. An exemplary program could be set up to determine if this plan would be feasible. This vocational high school or center also may be used for adult education programs and post-secondary programs in order to make maximum use of the facilities.

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<sup>1</sup>North Dakota, Department of Public Instruction, Sixty-Second Annual Report of the Director of Secondary Education, (Bismarck, Department of Public Instruction, 1969), pp. 24, 26, 31, 33.

<sup>2</sup>Ibid., p. 9.

## TOTAL ENROLLMENTS AND PERCENTAGE OF ENROLLMENTS IN SECONDARY VOCATIONAL EDUCATION

State	Total Secondary Schools	Secondary Vocational Education	Agri- culture	Distrib- utive Education	Health	Home Economics	Office Educa.	Tech.	Trade and Industrial
United States									
Enrollment	12,140,030	3,532,823	508,675 <sup>a</sup>	151,378	16,734	1,475,235	985,398	27,614	367,789
Per Cent		29.10	4.19	1.24	.14	12.15	8.12	.23	3.03
North Dakota									
Enrollment	45,358	12,359	3,192	372		6,922	1,787		86
Per Cent		27.20	7.04	.82		15.26	3.93		.19
Minnesota									
Enrollment	253,261	53,551	14,526	2,810		27,335	6,980		1,900
Per Cent		21.14	5.74	1.11		10.79	2.75		.75
Montana									
Enrollment	50,055	9,422	2,630	587		4,249	335	550	1,071
Per Cent		18.82	5.25	1.17		8.48	.67	1.11	2.14
South Dakota									
Enrollment	49,361	10,689	2,977	321		6,667	227	155	342
Per Cent		21.70	6.03	.65		13.51	.46	.31	.69

<sup>a</sup>U. S. Department of Health, Education, and Welfare, Annual Report, Fiscal Year 1967, Vocational and Technical Education (Washington, D.C.: Government Printing Office, 1969), p. 104.

U. S. Department of Health, Education, and Welfare, Enrollments in Secondary and Post-Secondary Vocational and Technical Education (Washington, D.C.: Division of Vocational and Technical Education Bureau of Adult, Vocational & Library Programs, 1969), p. 5.

TOTAL ENROLLMENT IN AREAS OF SECONDARY VOCATIONAL EDUCATION

Total Enrollment Secondary Vocational Education								Trade and Industrial
	Agri-culture	Distrib-utive Education	Health	Home Economics	Office	Technical		
United States	3,532,823	508,675	151,738	16,734	1,475,235	985,398	27,614	367,789
North Dakota	12,359	3,192	372		6,922	1,787		86
Minnesota	53,551	14,526	2,810		27,335	6,980		1,900
Montana	9,422	2,630	587		4,249	335	550	1,071
South Dakota	10,689	2,977	321		6,667	227	155	342
National Mean	65,422	9,419	2,803	309	27,319	18,248	511	6,810
National Median	44,426	6,018	1,148	22.5	19,476.5	4,166	87	84
National Range for Upper Quartile	389,802	49,107	33,719	4,796	122,308	184,043	6,784	43,702
	82,396	16,144	2,810	330	42,197	21,975	342	10,313
National Range for Lower Quartile	12,359	1,448	321	0	6,088	880	0	1,071
	1,335	47	0	0	705	0	0	86
								5.69

U. S. Department of Health, Education, and Welfare, Annual Report, Fiscal Year 1967, Vocational and Technical Education (Washington, D.C.: Government Printing Office, 1969), pp. 103-106.

ENROLLMENT IN POST-SECONDARY VOCATIONAL EDUCATION CLASSES

Total Post- Secondary Enrollment	Agri- culture	Distrib- utive Education	Health	Home Economics	Office	Technical	Trade and Industrial
United States 499,906	8,093	21,003	54,135	3,506	192,639	97,156	123,374
North Dakota 2,334		78	318		532	588	820
Minnesota 8,017	81	193	718		1,439	1,292	4,294
Montana 556	76	29	97		73	113	168
South Dakota 423			141			77	205
National Mean 9,257	149	388.9	1002	64.9	3567	1799	2284
National Median 3932		68.5	500.5		631	817.5	483.5
National Range for 181,437	2406	8145	9504	914	96102	18391	45975
Upper Quartile 7861	143	216	1380	39	2532	1775	2564
National Range for 1159	0	0	141	0	55	178	73
Lower Quartile 6	0	0	0	0	0	0	0
							5.70

U. S. Department of Health, Education, and Welfare, Annual Report, Fiscal Year 1967, Vocational and Technical Education (Washington, D.C.: Government Printing Office, 1969), pp. 103-106.

ENROLLMENT IN AREAS OF ADULT VOCATIONAL EDUCATION CLASSES

	Total Adult Education	Agri- culture	Distrib- utive Education	Health	Home Economics	Office	Technical	Trade and Industrial
United States	2,904,109	413,454	303,783	42,721	685,225	389,194	140,431	966,501
North Dakota	5,918	1,238	61		3,458	549		612
Minnesota	75,760	11,847	4,011	100	18,762	9,446	6,487	25,107
Montana	4,632	1,039	146	119	1,196	50	273	1,809
South Dakota	6,298	2,454	432		452	1,152		1,808
National Mean	54,464	7,656	5,625	791	12,689	7,207	2,600	17,894
National Median	63468	1344	1699	318.5	6550.5	1732.5	795	11390
National Range for Upper Quartile	489,339 68124	209,515 6724	107,734 4568	6867 894	109760 17511	91832 6530	42560 2867	129568 25107
National Range for Lower Quartile	5230 25	229 0	176 0	84 0	1140 0	194 0	181 0	2061 10

5.71

U. S. Department of Health, Education, and Welfare, Annual Report, Fiscal Year 1967, Vocational and Technical Education (Washington, D.C.: Government Printing Office, 1969), pp. 103-106.



## CHAPTER VI

### SUMMARY

This chapter presents a summary of the needs assessment under the following four headings:

Procedures

Results of Pilot and Statewide Assessment

Justification of Assessment Results

Recommendations

#### Procedures

This need assessment study evolved from the requirement of the United States Office of Education for identification of critical educational needs of the state before state assumption of responsibility for Title III, ESEA. North Dakota presented, in its 1969 State Plan, a series of critical educational needs gleaned from a Statewide Study of Education conducted during the mid-sixties. By mutual agreement of all parties, these critical needs were considered to be too administratively-oriented and not sufficiently learner-oriented.

Early in the Spring of 1969 the State Coordinator requested the State Evaluator to undertake a statewide assessment of educational needs as identified from the standpoint of the learner. The first step in this assessment was to survey what had been done by other states. The result of this survey was a preliminary instrument based primarily on a study in Wisconsin, but including ideas and needs taken from numerous other assessment studies.

## 6.2

This instrument was validated by a class in educational measurements composed of thirty doctoral education students. They were requested to identify weak or missing items or unsound procedures according to theory of test development. The revised instrument was pilot-tested, using two forms, in twenty-three districts in Northeastern North Dakota. Seniors, their parents, and educators completed this instrument. The results of this pilot study are presented as Chapter III of this report.

Based on the pilot study, the instrument was modified to facilitate data analysis when conducting the statewide assessment. Modifications included limiting the responses to ten per category so that each response could be marked in a single IBM card column. The final instrument, also in two forms, was submitted to eighth and twelfth grade students, their parents, and educators in the eight regional center cities, and in forty-six smaller districts randomly selected on the basis of region enrollment and number of districts of each size category in the region. Also, instruments were sent to the following populations:

1. School board members in the sampled districts
2. Migrants identified through a 1965 USOE study
3. College graduates of the University of North Dakota from 1963-68 living in four randomly selected states
4. High school dropouts identified by the North Dakota Employment Service
5. Welfare recipients from ten randomly selected County Welfare Boards
6. Retired people who were members of thirteen randomly selected old-age clubs

The results of the statewide assessment are given in Chapter IV.

### 6.3

For both the pilot and statewide assessments, the procedures included submitting enough instruments to each district for all students, parents, and educators. The student instruments were administered in class, with the parent instrument, the opposite form of the one completed by the child, being detached by the student and taken home. The educator instruments were to be completed by the teachers in a teachers' meeting. Both the parent and educator instruments were returned in attached envelopes in order to guarantee confidentiality of responses. The other populations in the statewide assessment received their instruments directly by mail or through the agency identified in the previous paragraph.

Data analysis for both assessments consisted of determining the mean response for each item. Since respondents ranked only five items per category, the means were between 1.0 and 5.0. These means were then adjusted for differences in the frequency of responses to the items. Finally, the means were adjusted for differences in the importance of the categories as viewed by respondents. These doubly adjusted means were then ranked in ascending order with the item having the smallest mean being ranked as most important according to the judgment of respondents.

The final procedure was to determine whether the highly ranked needs were critical in North Dakota in comparison to other states. This was done by requesting specialists in the fields of each need to identify evidence to justify each need in comparison to national and other state norms, and to interpret from the evidence whether each need is critical or not. See Chapter V for the results of this need justification.

Results of the Pilot and Statewide Assessments

Chapters III and IV contain the results of the pilot and statewide assessments, respectively. These results reveal, as anticipated, considerable agreement between the two assessments. As a summary of these two assessments, Table 27 presents a comparison of the twenty-five highest ranked items from each assessment. The rankings used in this table were obtained by summing the rankings given each item by students, parents, and educators, and ranking this composite sum.

TABLE 27

COMPARISON OF COMPOSITE RANKINGS  
FROM PILOT AND STATEWIDE ASSESSMENTS

Statewide Category Number	EDUCATIONAL NEED	Composite	
		Statewide Rank	Pilot Rank
4	Program for Slow Learners	1	1
4	Program for Alienated Youth	2	2
5	Skilled Trades	3	4
4	Program for Mentally Handicapped	4	17.5
3	Personal Counseling	5	3
4	Program for Academically Talented	6	9
4	Program for Average Pup'	7	17.5
3	Junior H.S. Guidance Se e	8	8
8	Better Classroom Facilities & Equipment	9	* 48
3	Advisory Services to Teachers for Student Problems	10	6.5
3	Educational-Vocational Guidance	11	5
4	Prog. for Students Terminating Education with High School	12	6.5
5	Agricultural	13	14
5	Business	14	15
5	Electronics	15	19
8	Better Libraries and Instructional Center Facilities and Equipment	16	* 50
4	Program for Emotionally Disturbed	17	20
5	Human Services	18	11
5	Industrial Arts	19	26
8	More Specialized Personnel	20	* 53.5
7	Individualized Instruction Programs	21	10

Table 27--Continued

Statewide Category Number	EDUCATIONAL NEED	Composite	
		Statewide Rank	Pilot Rank
5	Auto Shop	22	* 39
8	Special Education Teacher	23	37.5
8	Add'l Textbooks & Instructional Supplies	24	* 55
7	Resource Persons for Use in Classroom	25	28.5
6	Reading Specialist	26	12
8	More Paraprofessional Personnel	33.5	21
5	Home Economics	36	24
6	Post-Graduation Employment Specialist	37	25
6	School Psychologist	39.5	* 22.5
1	Foreign Languages	44	* 16
6	Speech Therapist	55	* 13
	Prog. for Educationally Disadvantaged	(not included)	22.5

\*Educational needs for which rankings differed by more than fifteen positions between pilot and statewide assessments.

There was agreement between the two assessments, even taking into consideration wording differences among the items used in the two instruments, in ranking seventeen of the items within the first twenty-five. Only the eight items which are starred changed rankings by more than fifteen positions. With the exception of 3, better classroom facilities and equipment (composite rank of 9th in the statewide and 48th in the pilot assessment), and 10, better library and instructional center facilities and equipment (16, 50), all the variation in rankings between the pilot and statewide assessments occurred for items composite ranked twentieth or lower.

It will be noted that many of the items for which definite ranking differences occurred came from category 8, more money for education. A partial answer for the marked improvement in the ranking of this category and the items falling under it is the rewriting of the category title for the statewide

instrument. The original title in the pilot assessment was budget allocations for education, a term which apparently had little meaning to students, parents, and even teachers.

The results obtained when comparing the rankings between the several populations of students, parents, and educators strongly support the requirement of the United States Office of Education that state assessments be broadly based and include the learner. Marked differences in rankings of specific items were apparent between the populations. No group, either educator or parent, was found to rank the need items similar to the rankings of students. It is strongly recommended that future statewide or local assessments consider this evidence of differing attitudes concerning educational needs and broadly define the populations which will be assessed.

Despite the obvious differences between populations and items, considerable agreement was found in the number of items ranked by the several populations with the first twenty-five. Considering the first twenty-five items selected on the basis of the composite ranks as shown in the statewide column of Table 27, seniors included 20 of the composite items among their first twenty-five, 8th graders 17, parents 18, and educators 20.

Some regional differences were apparent. Following this paragraph will be found a list of those needs for each region which apparently were not considered by the respondents to be of the same importance for their region, as they were for the state. The regional needs which the respondents ranked instead are also given in this list. The list contains the item number of each need as it appeared in Table 9, the regional rank followed by the state rank for the several populations, the composite statewide rank, and the composite sum of the regional rankings given each item. This latter figure is very

## 6.7

important in interpreting the data since it can be compared to 125 which represents the composite sum of the four population ranks for 22, resource persons for use in the classroom; the item with composite rank 25 in Table 9. Any of the twenty-five highest ranked needs which received a regional composite score of greater than 125 would be considered to be of lesser importance for that region. The reverse would be true for any item ranked lower than 25th as shown in Table 9, but which received a regional composite score less than 125. Thus, the figure 125 is considered to be the cut-off score for determining the twenty-five highest ranked items statewide and for each region as well.

Region 1 (Dickinson). It would appear that item 15,<sup>a</sup> psychological testing (composite rank 28), and 12, group counseling (30), are two needs where region one, compared to statewide rankings, indicates considerably more regional interest. The two needs ranked within the first twenty-five statewide, but not so ranked within region one, were 22, resource persons for use in the classroom (25), and 27, additional textbooks and instructional supplies (24). For these latter two needs, the sum of the regional rankings exceeded the cut-off figure of 125 by more than 10 points, while the reverse was true for the first two needs.

Region 2 (Mandan) This region reported the greatest number of different needs as compared to the statewide rankings. Needs where the composite sum of the population ranks exceeded the 125 figure by more than 10 points, indicating less interest within the region than for the state, were 26, auto shop (22), 33 industrial arts (19), 34, program for emotionally disturbed (17), and 51, special education teacher (23). In turn, regional interests which were less than

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<sup>a</sup>Item numbers, using the rank given each item by 12th graders as shown in Table 9 as the item numbers.

TABLE 28

## LIST OF REGIONAL NEEDS DIFFERING FROM STATEWIDE NEEDS

12th Grade Statewide Rank	EDUCATIONAL NEEDS	Regional/Statewide			Composite Statewide Rank	Regional Composite Sum
		12th	8th	Parent		
		Grade	Grade	Educator		
Region 1						
7	Individualized Instruction Programs	11/12	40/25	43/44	21	131
13	Electronics	43/13	35/23	21/24	15	129
22	Resource Persons for Use in Class	21/22	26/17	51/51	25	138
27	Add'l Textbooks & Instruc. Supply	45/27	17/15	65/56	24	147
51	Special Education Teacher	52/51	28/30	22/16	23	132
12	Group Counseling	7/12	15/33	44/42	30	101
13	Electronics	9/15	37/56	17/29	28	84
30	County/Regional Prog. of Shared Svs.	22/30	32/29	49/47	27	115
35	Academic Placement Specialist	27/35	19/37	32/26	33.5	119
Region 2						
8	More Specialized Personnel	11/ 8	27/14	61/50	20.	128
13	Electronics	12/13	50/23	40/21	15	126
26	Auto Shop	17/26	53/46	47/19	22	147
33	Industrial	54/33	55/36	19/13	19	165
34	Program for Emotionally Disturbed	36/34	41/ 9	24/23	17	140
51	Special Education Teacher	53/51	67/30	14/16	23	161
12	Group Counseling	2/12	28/33	41/42	30	114
19	Instruc. for Students Home Bound	31/19	4/ 5	48/54	31	125
39	External Sources of Referral for Children with Problems	16/39	44/49	30/40	45.5	118
43	Practical Arts	25/43	10/50	12/15	42	97



Table 28--Continued

12th Grade Statewide Rank	EDUCATIONAL NEEDS	Regional/Statewide			Composite Statewide Rank	Regional Composite Sum
		Grade		Educator		
		12th	8th			
Region 3						
27	Add'l Textbooks & Instruc. Supply	27/27	36/15	61/56	24	163
33	Industrial	42/33	43/36	27/13	19	126
19	Instruc. for Students Home Bound	7/19	9/ 5	44/54	31	118
24	Flexibility in Instruction	15/24	29/31	39/53	35	113
54	Reading Specialist	47/54	27/45	6/11	26	82
Region 4						
22	Resource Persons for Use in Class.	30/22	24/17	46/51	25	126
26	Auto Shop	40/26	53/46	27/19	22	142
51	Special Education Teacher	58/51	40/30	21/16	23	175
15	Psychological Testing	15/15	34/56	37/29	28	116
48	Home Economics	35/48	44/38	11/21	36	123
52	Element. School Guidance Service	44/52	20/48	25/28	39.5	118
Region 5						
7	Individualized Instruction Programs	17/ 7	48/25	50/44	21	152
8	More Specialized Personnel	32/ 8	32/14	49/50	20	136
10	Better Libraries & Instruc. Center	24/10	35/ 6	48/52	16	141
22	Resource Persons for Use in Class.	30/22	42/17	56/51	25	174
27	Add'l Textbooks & Instruc. Supply	37/27	34/15	61/56	24	172
15	Psychological Testing	38/15	22/56	28/29	28	112
38	Foreign Languages	7/38	44/40	18/25	44	119
39	External Sources of Referral for Children with Problems	54/39	8/49	36/40	45.5	125
46	Sec. School Voc. Tech. Programs	15/46	64/71	10/22	49	119

Table 28--Continued

12th Grade Statewide Rank	EDUCATIONAL NEEDS	Regional/Statewide			Composite Statewide Rank	Regional Composite Sum
		12th Grade	8th Grade	Parent Educator		
Region 6						
22	Resource Persons for Use in Class.	31/22	32/17	54/51	25	152
27	Add'l Textbooks & Instruc. Supply	37/27	10/15	60/56	24	137
23	Applied Arts	22/23	33/22	39/64	42	122
30	County/Regional Prog. of Shared Svs.	45/30	18/29	30/47	27	115
31	Post-Grad. Employment Specialist	8/31	30/41	27/27	37	117
39	External Sources of Referral for Children with Problems	13/39	54/49	37/40	45.5	118
47	More Paraprofessional Personnel	47/47	11/27	46/58	33.5	109
54	Reading Specialist	43/54	28/45	10/11	26	97
Region 7						
7	Individualized Instruction Programs	9/ 7	35/25	60/44	21	138
9	Advisory Services to Teacher	18/ 9	59/32	21/12	10	129
11	Junior H.S. Guidance Service	33/11	51/13	17/14	8	139
20	Business	45/20	28/26	30/ 9	14	127
30	County/Regional Prog. of Shared Svs.	7/30	15/29	41/47	27	73
31	Post-Grad. Employment Specialist	8/31	21/41	37/27	37	123
50	School Health Nurse	28/50	5/20	20/32	29	71
54	Reading Specialist	46/54	31/45	27/11	26	116
Region 8						
18	Human Services	26/18	28/12	36/30	18	141
51	Special Education Teacher	57/51	40/30	21/16	23	143
15	Psychological Testing	15/15	57/56	19/29	28	122
24	Flexibility in Instruction	28/24	19/31	47/53	35	118
28	Teaching Personnel	30/28	24/51	42/57	32	100
38	Foreign Languages	33/38	33/40	10/25	44	108

the 125 figure by more than 10 points were 12, group counseling (30), and 43, practical arts (42).

Region 3 (Williston) The only item where region three responses were obviously in excess of the statewide composite rankings was 27, additional textbooks and instructional supplies (24). There were two needs of particular appeal to respondents from this region; 24, flexibility in instruction (35), and 54, reading specialist (26).

Region 4 (Minot) Respondents indicated that 26, auto shop (22), and 51, special education teacher (23), were not as important to region four. While no item received composite rankings 10 points below the 125 figure, 15, psychological testing (28), was close to this figure as was 52, elementary school guidance services (39.5).

Region 5 (Devils Lake) Respondents from this region indicated five needs which they did not view in the composite, as important for their region; 7, individualized instruction programs (21), 8, more specialized services (22), 10 better library and instructional center facilities and equipment (16), 22, resource persons for use in the classroom (25), and 27, additional textbooks and instructional supplies (24). The only regional interest which obviously replaces one of these needs is 15, psychological testing (28).

Region 6 (Grand Forks) Composite ranks from Region six indicate 22, resource persons for use in the classroom (25), and 27, additional textbooks and instructional supplies (24), of less regional interest, while 30, county or regional programs of shared services (27), 47, more paraprofessional personnel (33.5), and 54, reading specialist (26), were suggested as possible replacements.

Region 7 (Bismarck) Region seven composite responses reveal 7, individualized instruction programs (21), and 11, junior high school guidance services (8), as

having limited regional appeal. Items 30, county or regional programs of shared services (27), and 50, school health nurse (29), are suggested instead. Region 8 (Fargo) Two items, 18, human services (18), and 51, special education teacher (23), were given composite rankings exceeding the cut-off figure of 125 by 10 points. Items ranked 10 points below the cut-off figure were 28, teaching personnel (32), and 38, foreign languages (44).

Some differences were also apparent, dependent upon where the respondents lived, the accreditation level of their district, and the enrollment size of their district. A list of the needs of particular importance, dependent upon where respondents lived, follows; the items included in this list were determined by applying the figure of 90, the sum of the statewide students' and parents' ranks for the 25th item, to the rural and urban composite sums in Table 14.

TABLE 29

## LIST OF NEEDS DEPENDENT UPON WHERE RESPONDENTS LIVE

12th Graders Overall Rank	EDUCATIONAL NEED	Rural/Urban			Overall Composite Rank
		12th	8th	Parents	
		Graders	Graders		
Rank		Rank	Rank	Rank	Rank
<u>Rural</u>					
25	Agricultural	7/39	10/47	6/20	13
26	Auto Shop	15/35	32/54	18/29	22
33	Industrial Arts	18/41	21/48	8/23	14
51	Special Education Teacher	48/53	30/32	13/17	23
12	Group Counseling	14/13	26/38	36/57	30
<hr/>					
<u>Urban</u>					
15	Psychological Testing	24/12	56/55	32/19	28

It is apparent that students living in town find group counseling, special education, and the several fields of vocational education as less important than do rural students; the reverse was true for psychological testing.

A list of the needs of particular importance, dependent upon the accreditation level of the respondents' districts, appears in Table 30; the items in this list were determined by using the figure of 125, the statewide composite sum for the 25th ranked item. Respondents from the 1A-2A accredited districts indicated more interest in flexibility for education and more educational personnel. On the other hand, respondents from 3A-NA districts indicated more interest in counseling and psychological services, foreign languages and home economics.

TABLE 30  
LIST OF NEEDS DEPENDENT UPON ACCREDITATION LEVEL  
OF RESPONDENTS' DISTRICTS 1A-2A / 3A-NA

12th Graders Overall Rank	EDUCATIONAL NEED	12th Grade Rank	8th Grade Rank	Parent Rank	Educator Rank	Comp. Rank
<u>1A-2A</u>						
7	Individualized Instruction Programs	5/23	18/47	35/46	16/32	21
19	Instruc. for Students Home Bound	12/27	5/10	52/54	51/62	31
24	Flexibility in Instruction	13/28	25/44	55/50	30/35	35
28	Teaching Personnel	17/33	41/60	57/57	2/ 5	32
54	Reading Specialist	52/55	40/52	12/13	10/21	26
<u>3A-NA</u>						
22	Resource Persons for Use in Classroom	15/26	17/21	48/55	32/38	25
15	Psychological Testing	21/17	56/59	25/29	41/17	28
12	Group Counseling	27/ 6	44/17	56/37	50/47	30

Finally, Table 31 reveals the need items of particular interest to respondents from the three enrollment levels of districts; again the figure of 125 was used to identify critical items. Needs which respondents from districts with less than a hundred rated as more important included shared services, practical arts, home economics, agriculture, auto shop, and special education. The latter three, plus reading, psychological testing, educational flexibility, more specialized and resource personnel, human services and program for emotionally disturbed, were highly rated by respondents from districts with one to four hundred enrollment. Finally, the latter five, plus applied arts and more teaching personnel, were ranked higher in districts with over four hundred enrollment.

Finally, some differences were noted when analyzing responses of the several other populations included in this assessment. Table 32 presents a list of the important differences in needs ranked by these various groups compared to the statewide composite rankings.

It will be noted that the majority of these items reflect needs provided by specially trained personnel. That these items were highly ranked in the statewide study would appear to reflect concern for humanizing education. That some of the other populations did not reflect this same concern would appear to be the result of an awareness of the lack of resources available to fulfill these needs. Further evidence supporting this explanation can be found in the similar low rankings given classroom, library and instructional center facilities and equipment and additional textbooks and supplies.

TABLE 31

LIST OF NEEDS DEPENDENT UPON ENROLLMENT LEVEL OF RESPONDENTS' DISTRICTS  
 <100/100-400/400+

Item No.	EDUCATIONAL NEEDS	12th		8th		Parents		Educator		Statewide Composite	
		Graders	Rank	Graders	Rank	Rank	Rank	Rank	Rank	Rank	Rank
<b>&lt;100</b>											
25	Agricultural	9/21/49		9/32/37		7/12/31		12/19/24		13	
26	Auto Shop	15/22/47		21/49/53		22/18/29		16/21/16		22	
51	Special Education Teacher	47/47/57		12/28/43		17/15/20		36/11/41		23	
30	County or Regional Prog. of Shared Services	26/31/28		17/27/35		37/47/53		16/31/12		27	
43	Practical Arts	28/49/37		26/51/48		13/16/7		30/54/40		42	
48	Home Economics	14/55/54		23/48/26		5/28/49		18/44/45		36	
<b>100-400</b>											
7	Individualized Instruction Programs	25/8/4		57/21/16		53/44/30		27/35/11		21	
8	More Specialized Personnel	17/6/11		16/14/14		50/48/53		50/25/23		20	
18	Human Services	20/19/33		20/11/17		54/19/42		42/36/26		18	
22	Resource Persons for Use in Classroom	29/18/17		32/16/27		60/50/38		37/38/25		25	
25	Agricultural	9/21/49		9/32/37		7/21/31		12/19/24		13	
26	Auto Shop	15/22/47		21/49/53		22/18/29		16/21/16		22	
34	Program for Emotionally Disturbed	40/32/28		10/8/13		33/20/14		48/18/13		17	
51	Special Education Teacher	48/47/57		12/28/43		17/15/20		36/11/41		23	
15	Psychological Testing	21/16/7		70/52/46		32/22/26		26/22/43		28	
54	Reading Specialist	53/52/56		40/42/56		16/11/25		30/10/29		26	
<b>400+</b>											
7	Individualized Instruction Programs	25/8/4		57/21/16		53/44/30		27/35/11		21	
8	More Specialized Personnel	17/6/11		16/14/14		50/48/53		50/25/23		20	
18	Human Services	20/19/33		20/11/17		54/19/42		42/36/26		18	
22	Resource Persons for Use in Classroom	29/18/17		32/16/27		60/50/38		37/38/25		25	
34	Program for Emotionally Disturbed	40/32/28		10/8/13		33/20/14		48/18/13		17	
15	Psychological Testing	21/16/7		70/52/46		32/22/26		26/22/43		28	
23	Applied Arts	23/25/22		33/20/19		69/60/45		65/46/37		42	
24	Flexibility in Instruction	36/20/13		43/33/25		58/53/55		32/37/21		35	
28	Teaching Personnel	38/35/5		37/57/38		44/58/59		13/3/1		32	

TABLE 32

LIST OF NEEDS RANKED BY OTHER POPULATIONS  
DIFFERENT THAN COMPOSITE RANKING

Item No.		School Board	College Migrant	Drop-outs	Welfare	Senior Citizen	Statewide Composite
3	Better Classroom Fac.	11	16.5	7	42	38	9
7	Indiv. Instr. Prog.	43	32	18	76	59	21
8	More Specialized Pers.	39	36	6	38	22	20
9	Advisory Services	47	10	33	17	10	10
10	Better Libraries	10	13	39	51	46	16
11	J.H. Guidance	34	29	15	13	12	8
14	Acad. Talented	20	5	54	27	18	6
18	Human Services	44	37	25	28	13	18
20	Business	35	14	40	14	6	14
22	Resource Persons	54	50	34	81	60	25
27	Add'l books & supplies	23	48	42	52	66	24

Justification of Assessment Results

Chapter 5 presented the reports of specialists in the fields of the highly ranked (upper third) educational needs from the pilot study. These reports identified evidence to justify the highly ranked needs as critical or not critical. (The reason for using highly ranked needs from the pilot study was the urgency of identifying the critical needs. There was hardly enough time available to conduct the assessment study described in Chapter 4. Thus, it was necessary to conduct the justification phase parallel in time to the assessment phase, requiring using the pilot study results for the justification phase.)

Following this paragraph in Table 33 will be found two lists of needs; those which the specialists concluded to be of critical importance and those which they concluded to be not critical. These lists are presented as a service to the reader. No attempt has been made to list these needs in the order of their importance as rated by the report writers. For a total understanding of why these needs are rated as shown in these lists, it will be necessary to read



TABLE 33

LISTING OF THE HIGHEST RANKED EDUCATIONAL NEEDS  
ACCORDING TO THEIR IMPORTANCE AS VIEWED BY THE  
JUSTIFICATION REPORT AUTHORS

12th Grade Statewide Rank	Identified as Critically Important	Statewide Composite Rank
1	Personal Counseling	5
2	Program for Slow Learners	1
4	Educational-Vocational Guidance	11
5	Program for Alienated Youth	2
6	Skilled Trades	3
7	Individualized Instructional Programs	21
8	More Specialized Personnel	20
9	Advisory Services to Teachers for Student Problems	10
10	Better Libraries and Instructional Center Facilities and Equipment	16
13	Electronics	15
15	Psychological Testing	28
16	Program for Mentally Handicapped	4
17	Program for Average Pupils	7
18	Human Services	18
26	Auto Shop	22
33	Industrial Arts	19
34	Program for Emotionally Disturbed	17
38	Foreign Languages	44
41	School Psychologist	39.5
42	Fine Arts	53
43	Practical Arts	42
51	Special Education Teacher for the Retarded	23
52	Elementary School Guidance Services	39.5
54	Remedial Reading Specialist	26
60	Speech Therapist	56
	Identified as Not Critical	
3	Better Classroom Facilities and Equipment	9
11	Junior High School Guidance Service	8
14	Program for Academically Talented	6
20	Business	14
21	Program for Students Terminating Education with H.S.	12
22	Resource Persons for Use in the Classroom	25
25	Agriculture	13
27	Additional Textbooks and Instructional Supplies	24
31	Post-Graduation Employment Specialist	37
48	Home Economics	36
49	Science	52
55	Mathematics	54
56	Language Arts	56

and study the full reports presented in Chapter 5. It must also be again emphasized that these lists and the reports of the specialists are presented to provide additional evidence upon which the State Title III Advisory Council and the Department of Public Instruction will identify the state's critical educational needs. These reports and recommendations represent solely the views of their authors and reactors. The State Coordinator, State Evaluator, or anyone else connected with Title III do not necessarily concur with the conclusions of the specialists.

It will be noted that several of the items included in this list received low rankings. The explanation for this occurrence is that more than the first twenty-five items highly ranked items on the pilot study were selected for justification. This served as a precaution against what did occur; change in rankings of some items between the pilot and statewide assessments.

#### Recommendations

This report has presented evidence upon which the critical educational needs for Title III in North Dakota can be identified. The report presents this evidence as a guide for the appropriate persons who will make the determination of the critical needs. Nothing presented in this report should be construed as anything more than a guide, certainly not the recommendations of the State Coordinator or Evaluator.

As the conclusion of this report, one recommendation will be made. This recommendation can best be introduced by making an analogy. The educational needs included in the assessment instrument used in this study can be likened to the first level of an outline. The first level of any outline should be quite broad. In it, this writer attempts to speak to every issue of the topic

being outlined. The first level of an outline is open to criticism since no two people would be likely to present the identical first level outlines for any complex topic.

It is only after successive levels that an outline presents a description of a topic so that every knowledgeable person agrees that the outline is thorough and comprehensive. Thus, with this needs assessment, and the critical needs which will result, it is only after further refinement at the local level that the critical needs will have meaning.

Considering this from another direction, it is only after considering the hundreds and even thousands of progressively more specific activities which each of the educational needs included in the instrument suggest that innovative programs of meaning at the local level be developed. This is the further refining that is comparable to the second and third levels of outlining in the analogy. Thus, it is highly recommended that each local educational agency planning to submit an application for Title III support be strongly encouraged to undertake a local needs study. This study should concentrate on one or a few of the educational needs highly ranked in this report. The purpose of the local study is to afford local citizens an opportunity to assist the local educational agency in defining what it was about the several educational needs which caused them to be highly ranked, and devising alternative plans for alleviating the needs. Thus, the local study will further define the needs found critical in this assessment.

These studies will afford an opportunity to identify what very specific action approaches might resolve the needs in each local setting. Further, the local study will afford an opportunity to assess interest in other needs which were not included in the assessment instrument because it was the judgment of those reviewing the instrument that they were related to included needs.

APPENDIX A  
ASSESSMENT OF EDUCATIONAL NEEDS  
IN THE STATE

## A.1

### Assessment of Educational Needs in the State

The assessment of educational needs for the State of North Dakota is still in progress. The following description presents the assessment plan and the established target dates for accomplishing the major phases of the assessment.

#### 1. What Agency Assessed the Needs in the State?

The assessment of needs for the State will be a joint effort of the Title III State Coordinator and other Department of Public Instruction Staff, the State Advisory Council and the University of North Dakota.

- a. The University of North Dakota is under contract to conduct the technical phases of the need assessment and present the results in summary form for review by the SEA staff and the Advisory Council.
- b. The SEA staff and the Advisory Council will review all available information to arrive at the most critical educational needs of the State which Title III might be the catalyst to resolve.

#### 2. How Were Assessment Procedures Planned and Designed?

Since North Dakota had recently conducted a thorough Statewide Study of Education\*, it was assumed that this Study would suffice to meet the need assessment requirements of Title III. Further consideration indicated that this Study lacked specificity in the area of learner aspects of the educational process. When the decision was made to reassess North Dakota's educational needs with the orientation placed on the learner, the SEA staff, Advisory Council and evaluation subcontractor (the University of North Dakota) had the experience of the Statewide Study of Education and the efforts of other States to draw upon in planning and designing need assessment procedures that would fit North Dakota. The results of this planning and designing are given in question 3, immediately following this paragraph.

#### 3. Describe the Overall Design for Conducting the Needs Assessment.

The overall short range design for conducting the need assessment embodies the following aspects:

- a. Scope: The scope includes two major components; identification of priority needs of the State and provision of evidence to justify the critical nature of these needs.

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\*This Study was completed in 1967 under the direction of the College of Education, University of North Dakota. The Study was the result of an appropriation of \$20,000 by the State Legislature, \$90,000 from the Department of Public Instruction using Title V, 503 funds, and \$10,000 from the University of North Dakota.

## A.2

Identification of the priority needs of the State require one major assumption; that no one agency or committee, be it the evaluation sub-contractor, the SEA staff or the Advisory Council, is in a position to solely and in isolation identify the critical needs of the State. If it is generally agreed upon by all the major theories of learning that students should have a voice in developing the teaching-learning process, it is equally true that these same students and the other key subgroups comprising the State's population should have a voice in identifying the critical educational needs of the State.

Provision of evidence to justify the critical nature of these needs is a recognition that a need might be critical to educators and adults, but the hard facts comparing North Dakota to the national norms might show pupils no worse off or even better in relation to this need than pupils from other States. Certainly first attention must be given to those needs where it can be shown that graduates of North Dakota schools are "shortchanged" in comparison to pupils from other states. These truly are critical needs of the state.

### b. Stated Objectives:

Identification of the Priority Needs of the State:

This identification will take place in the following two areas which serve as general objectives for the educational program in North Dakota where Title III might have an influence:

1. Cognitive, the differences between the skills, experiences and understandings learners should and have acquired in relation to national norms.
2. Affective, the differences between the attitudes, emotions and feelings students should and have acquired in relation to what is expected for an average number of society.

### c. Activities to Achieve Objectives:

Identification of the Priority Needs of the State:

1. Develop a design for this phase of the need assessment.
2. Identify populations who should take part in the assessment and how to reach them.
3. Prepare instruments to collect the required data.
4. Identify procedures to measure validity and reliability of the data gained through the instruments.
5. Analyze and interpret the data.
6. Identify the priority needs which should be considered in the second phase of the need assessment.

Provision of Evidence to Justify these Needs:

1. Identify sources of evidence to justify the needs (See 6 above) regionally within the State and nationally between North Dakota and other states.
2. Identify procedures for obtaining evidence which has not previously been compiled within the state.

### A.3

3. Assemble the data and interpret it.
4. Obtain national statistics and compare the state data to the national
5. Prepare a summary report for the State Coordinator, Department of Public Instruction staff, Advisory Council members and other interested personnel or agencies. This report will provide the data from which these persons can identify the critical needs of the state

#### d. Sampling Techniques:

##### Identification of the Priority Needs of the State:

The following populations will be sampled:

1. Educators (teachers, administrators and others)
2. School Board Members
3. Students (in-school and dropouts)
4. Migrants out of state
5. Adults (parents, welfare recipients, farmers, retired people, etc.)

A source of names for each population listed above, i.e., names from statewide testing program for students and parents, will be identified. Sampling will be conducted within the eight regions of the state based on the eight largest cities which serve as the hubs of commerce and distribution. (Refer to the map in Appendix D of this report, which is provided in response to Section 2.3.15, part 2, for an outline of the regions.) Sampling will be conducted so that the following questions can be answered:

1. What are the priority needs of the State?
2. What regional differences exist?
3. What rural-urban differences exist?
4. What differences exist between the various populations sampled?

##### Provision of Evidence to Justify These Needs:

The following populations will be sampled:

1. Students
2. Educators
3. Adults

For the most part it is anticipated that existing sources of data will be adequate to provide evidence to justify the critical nature of the priority needs identified in the first phase of the need assessment. Whenever existing sources are not available or are inadequate, assessment will be extended into a second phase to obtain the necessary descriptive data.

#### e. Reliability of Data

#### f. Validity of Data

#### Identification of the Priority Needs of the State

The same procedure is proposed to establish both the reliability and the validity of the data. This procedure requires several regional meetings to which respondents to the mailed instrument will be invited.

Before proceeding with the meetings, those in attendance will be requested to complete the instrument again. This will serve as a measure of test-retest reliability.

The meetings will provide an opportunity for participants to obtain an overview of the educational process as it now exists in North Dakota and as it is envisioned in the future. Opportunity will be afforded for questions. At the conclusion of the meeting participants will again complete the questionnaire. A comparison of the pre- and post-meeting responses will indicate validity, or the degree to which the responses of participants given after the opportunity to discuss educational needs agree with those given before. Any differences will be taken into account when preparing summary reports for the state.

#### Provision of Evidence to Justify These Needs:

There will be no instruments developed for this phase of the need assessment, thus, no measures of validity or reliability will be required.

#### g. Treatment of Data:

##### Identification of the Priority Needs of the State:

The treatment procedures proposed are very unsophisticated in light of the type of data to be gathered and the audiences to which the results will be presented. The only concern of the audiences will be for the rank order importance of the needs and any regional, rural-urban or population differences which might exist. Also, out of the over one hundred responses given in the instrument, the audiences will be concerned only with the first few which are generally viewed to be of the most urgent and critical nature.

The state evaluator will apply appropriate correction factors to take into account non-respondents and the priority nature of the categories under which responses to the instrument are found. Rankings of the responses will be made and the first quarter of the responses in the order of their priority will be subjected to further study. Appropriate statistics (most likely analysis of variance) will be used to test for regional, rural-urban and population differences in the ranking assigned to and the priority nature of the responses. The results will be summarized in a non-statistical position report.

#### Provision of Evidence to Justify These Needs:

Each need which the statistical analysis described in the previous paragraph indicates is of priority urgency as viewed by most of the populations and throughout the State will be studied further. This study will encompass a search for evidence which will indicate the status of



## A.5

the need in North Dakota and nationally. Comparison will be made between North Dakota's status and that of other states and the nation. Particular attention will be paid to Minnesota and the Minneapolis-St. Paul metropolitan area where many North Dakota youth migrate after completing their education. The results will be summarized in another non-statistical position report.

The previous description applies to the short range design for need assessment. The long range design is in reality a reassessment of the needs conducted as part of the annual Statewide Title III evaluation. Since the evaluation will touch on all major aspects of the educational process, not just those encountered as they relate to the critical needs for Title III, data will be available for reassessing the critical needs periodically. (Refer to Section 2.3.11).

The target dates for the different phases of the need assessment are:

Identification of the Priority Needs of the State:	TARGET DATES
Pilot Study	
1. Finalize instruments and sampling procedures . . . . .	4/30/69
2. Print and mail instrument . . . . .	5/ 7/69
3. Follow-up of the instrument . . . . .	5/21/59
4. Conduct regional meeting(s) to establish validity and reliability (tentative) . . . . .	5/23/69
5. Complete coding and statistical analysis of the data .	6/30/69
6. Complete preliminary report . . . . .	8/15/69
Statewide Study	
1. Finalize instruments and sampling procedures based on the pilot study . . . . .	9/ 5/69
2. Print and mail instruments . . . . .	9/20/69
3. Follow-up of instrument . . . . .	10/10/69
4. Conduct regional meeting(s) to establish validity and reliability . . . . .	10/20/69
5. Complete coding and statistical analysis of the data*.	10/31/69
6. Complete report of priority assessment** . . . . .	11/30/69

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\*It will be possible based on the pilot study to identify with a high degree of certainty which needs will be given the highest priority. Because of the time pressure it will be necessary to collect evidence justifying the critical nature of these needs at the same time that evidence to prove the statewide priority placed on these needs is obtained.

\*\*A joint final report of the priority assessment and evidence to justify the critical nature of the needs is anticipated.

4. Sources of Information.

Identification of the Priority Needs of the State:

A specially prepared instrument composed of the major categories of educational needs, both learner and system oriented, with a series of responses under each category will be given participants. The participants will be asked to rank the responses within each category according to their importance.

Provision of Evidence to Justify These Needs:

Any and all sources of information available through the Department of Public Instruction, other state and Federal agencies and private organizations concerning education will be enlisted in an effort to provide justification of the critical nature of the priority needs.

Information not obtainable through these sources will be gained through surveys and other means. Refer to this Section, part 3, for an outline of the procedures proposed for establishing sources of information and target dates for having identified the necessary information.

5. The Educational Needs of the State as a Whole.
6. The Critical Educational Needs of the State and its Regions.
7. The Strategy for Utilizing Title III to Meet the Critical Needs of the State.

These questions cannot be answered until the need assessment has been completed. The target date for stating the critical educational needs of the state and its regions is December 31, 1969.

8. Procedures for Effecting Cooperation of the Various Educational Programs.

The assessment of critical needs and the goals having been established, the State Advisory Council and the Department of Public Instruction Title III staff will develop a long-range strategy for advancing education in the state.

The Title III staff will cultivate a cooperative relationship with the various agencies in the state such as welfare, Office of Economic Opportunity, P.T.A., State Legislature, colleges and universities and other agencies who strive to improve educational opportunities for children. The entire educational community must be involved in order to reach the identified educational needs and goals.

State Department personnel responsible for other Federal programs (Title I, Title II, Title V, Title VI, etc.) will be encouraged to pool their energies and funds whenever legal with Title III in order to plan and carry out the strategy for advancing education in the state.

A.7

This long-range plan will include:

1. Continued assessment of educational needs.
2. Regular examination and analyzation of identified needs.
3. Periodic evaluation of Title III's impact for meeting the identified needs and goals of education in the state.
4. Coordination of all existing resources, whenever possible, in attacking persistent educational problems.
5. The use of Title III funds, as recommended by the State Advisory Council and directed by the Superintendent of Public Instruction, in a manner that will best promote a desired educational change.

APPENDIX B  
PILOT QUESTIONNAIRE

## ASSESSMENT OF EDUCATIONAL NEEDS IN NORTHEASTERN NORTH DAKOTA

## STUDENT FORM

Dear Senior:

As the time for your high school graduation approaches, I am sure you and your friends are looking back over some of your educational experiences. We would like you to share these thoughts by responding to the attached questionnaire. We would also like you to take home a similar questionnaire for your parents to fill out and return in the attached envelope. Before reading the following directions, please detach the questionnaire and envelope for your parents and put it aside to take home.

Please complete the following questions before reading the General Instructions given below.

Your Name \_\_\_\_\_

Home Address \_\_\_\_\_

Sex: ☐ Male, ☐ Female

Where do you reside? ☐ Town, ☐ Country, but not on a farm, ☐ Farm.

Future plans? ☐ College, ☐ Service, ☐ Work, ☐ Vocational school,  
☐ Farm, ☐ Other (describe) \_\_\_\_\_

What type of work does your father do? ☐ Farmer, ☐ Clerical (clerk, banker, etc.),  
☐ Professional (teacher, doctor, etc.), ☐ Businessman,  
☐ Laborer, ☐ Other (describe) \_\_\_\_\_

General Instructions: This questionnaire contains a number of categories concerning education; for example, SUBJECT FIELDS. Under each category will be found a list of responses; for the example of SUBJECT FIELDS, the responses include mathematics, foreign language, etc. Select the response which you believe needs the greatest emphasis or improvement and rank it number one by writing a '1' in front of the response. For example, if you feel that your foreign language program is weak, and you believe it should receive the most emphasis for improvement in the SUBJECT FIELDS category, you should rank it number one (1). The item which you believe to need much emphasis toward improvement, but not as much as '1' would be ranked number two (2). Continue to rank what you consider to be the five (5) responses most needing emphasis or improvement. See the partial example below.

## EXAMPLE

## Category 0. SUBJECT FIELDS

- a. Mathematics
- 1 b. Foreign Language
- 2 c. Science (biology, physics, etc.)

(This list could be extended to include all subject fields taught in high school)

## ASSESSMENT OF EDUCATIONAL NEEDS IN NORTHEASTERN NORTH DAKOTA

## PARENT FORM

Dear Parent:

As a parent of a high school senior, you have several interests in the educational program of your local school district. Not only are you concerned about the quality of your son's or daughter's education, but, as a taxpayer, you are also concerned with the cost of providing this educational program. Because of this interest, we would appreciate your assistance in choosing the areas of education which most need additional stress.

Your responses will be completely confidential. As you note, no names have been requested, and the self-addressed envelope to be used in returning the questionnaire has been pre-stamped and post-marked. Your local district will receive a summary of what all the students, parents and teachers taken together as a group think are the areas most needing additional stress. This could be useful for future planning.

General Instructions: This questionnaire contains a number of categories concerning education; for example, SUBJECT FIELDS. Under each category will be found a list of responses; for the example of SUBJECT FIELDS, the responses include mathematics, foreign language, etc. Select the response which you believe needs the greatest emphasis or improvement and rank it number one by writing a '1' in front of the response. For example, if you feel that your foreign language program is weak, and you believe it should receive the most emphasis for improvement in the SUBJECT FIELDS category, you should rank it number one (1). The item which you believe to need much emphasis toward improvement, but not as much as '1' would be ranked number two (2). Continue to rank what you consider to be the five (5) responses most needing emphasis or improvement. See the partial example below.

## EXAMPLE

## Category 0. SUBJECT FIELDS

- a. Mathematics
- 1 b. Foreign Language
- 2 c. Science (biology, physics, etc.)

(This list could be extended to include all subject fields taught in high school)

## ASSESSMENT OF EDUCATIONAL NEEDS IN NORTHEASTERN NORTH DAKOTA

## EDUCATOR FORM

Dear Educator:

The purpose of this questionnaire is to seek your opinions regarding the educational needs in your school district. Because of your position as an educator, you have a personal knowledge of the areas of education which need additional emphasis. While your district's seniors and their parents have also been asked to respond, your comments as professionals are most urgently required.

Please use the attached envelope to return the completed questionnaire. Your name has not been requested so that confidentiality of your responses will be maintained.

Please complete the following questions before reading the General Instructions given below.

Subject area(s) if you teach other than general elementary \_\_\_\_\_

What position(s) do you hold: Teacher, Counselor, Librarian,  
Administrator, Other (describe) \_\_\_\_\_

Sex: Male, Female

Degree: Less than Bachelor's, Bachelor's, Master's or equivalent,  
15 semester hours or more beyond the Master's

Years of educational experience: 1, 2-4, 5-9, 10-19, 20-29, 30+

Grades taught (circle them): k 1 2 3 4 5 6 7 8 9 10 11 12

Subject area(s) if you teach other than general elementary \_\_\_\_\_

General Instructions: This questionnaire contains a number of categories concerning education; for example, SUBJECT FIELDS. Under each category will be found a list of responses; for the example of SUBJECT FIELDS, the responses include mathematics, foreign language, etc. Select the response which you believe needs the greatest emphasis or improvement and rank it number one by writing a '1' in front of the response. For example, if you feel that your foreign language program is weak, and you believe it should receive the most emphasis for improvement in the SUBJECT FIELDS category, you should rank it number one (1). The item which you believe to need much emphasis toward improvement, but not as much as '1' would be ranked number two (2). Continue to rank what you consider to be the five (5) responses most needing emphasis or improvement. See the partial example below.

## EXAMPLE

## Category 0. SUBJECT FIELDS

- a. Mathematics
- 1 b. Foreign Language
- 2 c. Science (biology, physics, etc.)

(This list could be extended to include all subject fields taught in high school)

## Category 1. MAJOR ASPECTS OF A QUALITY EDUCATIONAL PROGRAM

The following items are all components of a well-rounded educational program. Some of these components will exist in your school district; others in the surrounding region. After giving careful consideration to each component choose the one which you feel most needs to be added or improved and rank it '1'. (See EXAMPLE on previous page if you have questions.) Continue to rank until you have selected five (5) items.

## RANK

- a. Subject fields taught in school  
(math, science, etc.)
- b. Level of education  
(pre-school through adult)
- c. Vocational-technical programs  
(auto mechanics, agriculture, business, etc.)
- d. Counseling and psychological services
- e. School services for pupils  
(health, remedial reading, etc.)
- f. Instructional approaches used by teachers with students  
(television, team teaching, audio-visual, etc.)
- g. Educational programs for students with particular needs  
(slow learner, gifted, handicapped, etc.)
- h. In-service instruction for teachers covering various topic areas
- i. Teacher personnel and the problems occurring with obtaining and retaining teachers
- j. Administrative services  
(school-community relations, financial management, supervision of instruction, etc.)
- k. Budget allocations for the various aspects of education  
(personnel, facilities, supplies, etc.)



## Category 2. SUBJECT FIELDS

This category lists subject fields that may be taught in your school. Choose the subject field which you feel most needs emphasis in your school and rank it as '1'. Continue to rank until you have ranked five (5) of the items.

## RANK

- ☐ a. Science (biology, chemistry, etc.)
- ☐ b. Social studies (history, geography, etc.)
- ☐ c. Mathematics
- ☐ d. Practical arts (home economics, bookkeeping, agriculture, etc.)
- ☐ e. Health and physical education
- ☐ f. Fine arts (music, drama, art, etc.)
- ☐ g. Language arts (English, literature, speech, etc.)
- ☐ h. Foreign languages
- ☐ i. Other (specify) \_\_\_\_\_

## Category 3. LEVELS OF EDUCATION

This category contains levels of education that may be needed in your school district or in the immediate region. Some may not be in operation in your district, however, if you feel more emphasis should be placed on that level you should show this in your ranking. Again rank five (5) choices with '1' indicating the level needing the greatest additional emphasis.

## RANK

- \_\_\_ a. Infant education (1-2 year olds)
- \_\_\_ b. Early childhood (3-4 year olds)
- \_\_\_ c. Kindergarten education (5 year olds)
- \_\_\_ d. Primary education (grades 1-3)
- \_\_\_ e. Intermediate level education (grades 4-6)
- \_\_\_ f. Junior high school education (grades 7-9)
- \_\_\_ g. Senior high school education (grades 9-12)
- \_\_\_ h. Post-secondary vocational-technical education
- \_\_\_ i. Junior college
- \_\_\_ j. College-university education
- \_\_\_ k. Adult education
- \_\_\_ l. Other (specify) \_\_\_\_\_

## Category 4. COUNSELING AND PSYCHOLOGICAL SERVICES

The following items are services that may be needed by students in your school district. They are concerned with helping students to understand themselves and their surroundings, both as social beings and as productive members of society. Please rank your first five (5) choices.

RANK

- ☐ a. Pre-school guidance service
- ☐ b. Elementary school guidance service
- ☐ c. Junior high school guidance service
- ☐ d. Educational-vocational guidance
- ☐ e. Personal counseling
- ☐ f. Group counseling
- ☐ g. Psychological testing
- ☐ h. Advisory services to teacher for student problems
- ☐ i. External sources of referral for children with problems (non-school).
- ☐ j. Follow-up of graduates
- ☐ k. Other (specify) \_\_\_\_\_

**Category 5. EDUCATIONAL PROGRAMS**

This category contains educational programs designed to serve students with particular abilities or problems. Choose the one you believe to be most in need of additional emphasis or improvement in your school district or immediate region and rank it as '1'. Continue to rank through five (5) choices.

**RANK**

- ☐ a. Program for mentally handicapped (trainable, educatable, etc.)
- ☐ b. Program for slow learners
- ☐ c. Program for average pupils
- ☐ d. Program for academically talented
- ☐ e. Program for alienated youth (potential dropouts, unmotivated, etc.)
- ☐ f. Program for students terminating education with high school
- ☐ g. Program for educationally disadvantaged
- ☐ h. Program for culturally distinct (migratory, Indian, etc.)
- ☐ i. Program for physically handicapped (visual, orthopedic, etc.)
- ☐ j. Program for emotionally disturbed
- ☐ k. Other (specify) \_\_\_\_\_

## Category 6. IN-SERVICE INSTRUCTION FOR TEACHERS

The following items represent aspects of education for which teachers may desire additional information through in-service instruction. Rank the item which you feel teachers most desire help as '1'. Continue to rank through five (5) choices.

## RANK

- ☐ a. Instruction in using team teaching
- ☐ b. Instruction in selection and use of audio-visual materials and equipment
- ☐ c. Instruction in curriculum development
- ☐ d. Instruction in use of the computer as an instructional aid.
- ☐ e. Instruction in use of educational research
- ☐ f. Instruction in evaluation of standardized tests
- ☐ g. Instruction in subject matter content
- ☐ h. Instruction in developing pupil motivation
- ☐ i. Instruction in using teacher aides
- ☐ j. Instruction in pupil guidance
- ☐ k. Instruction in teaching students with learning disabilities
- ☐ l. Instruction in individualizing the learning process
- ☐ m. Other (specify) \_\_\_\_\_

## Category 7. TEACHER PERSONNEL

This category lists some of the problems of obtaining and retaining school personnel. Rank the item which you feel needs most emphasis as '1'. Continue ranking through five (5) choices.

## RANK

- \_\_\_ a. Methods of teacher selection
- \_\_\_ b. Teacher utilization and specialization
- \_\_\_ c. Teacher involvement in decision making
- \_\_\_ d. Supply of teacher candidates (number of teachers seeking positions)
- \_\_\_ e. Coping with teacher militancy (teacher negotiations)
- \_\_\_ f. Quality of teacher candidates (teacher training)
- \_\_\_ g. The problem of high teacher turnover
- \_\_\_ h. Ways of evaluating teacher effectiveness
- \_\_\_ i. Systems of incentive (salary schedules, insurance, etc.)
- \_\_\_ j. Other (specify) \_\_\_\_\_

## Category 2. VOCATIONAL-TECHNICAL PROGRAMS

This category lists possible programs of vocational or technical education for your school or immediate region. Choose the vocational or technical program which you feel most needs emphasis in your school or region and rank it as '1'. Continue to rank until you have ranked five (5) of the items.

## RANK

- ☐ a. Business (stenography, accounting, etc.)
- ☐ b. Appliance and small motor repair
- ☐ c. Skilled trades (carpentry, plumbing, electrician, etc.)
- ☐ d. Applied arts (interior design, ceramics, etc.)
- ☐ e. Industrial (machine shop, welding, etc.)
- ☐ f. Human services (nurse aide, barber, beautician, etc.)
- ☐ g. Auto shop (motor repair, body work, etc.)
- ☐ h. Electronics (TV, radio, computer, etc.)
- ☐ i. Agricultural (farming, farm equipment, feed and seed, etc.)
- ☐ j. Home economics (food service, clothing, etc.)
- ☐ k. Other (specify) \_\_\_\_\_

## Category 3. SCHOOL SERVICES FOR PUPILS

This category lists titles of specially trained persons who may provide services to students in your school district. Again, rank five (5) choices with '1' indicating the service which you feel needs the greatest additional emphasis.

## RANK

- ☐ a. School health nurse
- ☐ b. Social worker
- ☐ c. Remedial reading specialists
- ☐ d. Post-graduation employment specialist
- ☐ e. Academic placement specialist
- ☐ f. Speech therapist
- ☐ g. Special education teacher for retarded
- ☐ h. Learning disabilities teacher
- ☐ i. School psychologist
- ☐ j. Other (specify) \_\_\_\_\_



## Category 4. INSTRUCTIONAL APPROACHES

The following items represent some instructional approaches which are commonly used throughout the United States. Identify those your school should add or emphasis to a greater extent. Please rank your first five (5) choices.

RANK

- \_\_\_ a. Instruction for home bound students
- \_\_\_ b. Team teaching
- \_\_\_ c. Resource persons for use in the classroom
- \_\_\_ d. Teacher aides
- \_\_\_ e. Individualized instructional programs
- \_\_\_ f. Non-graded program
- \_\_\_ g. Computer assisted or managed instruction
- \_\_\_ h. Audio-visual instruction
- \_\_\_ i. Televised educational programs
- \_\_\_ j. Closed circuit TV in the schools
- \_\_\_ k. Programmed instruction (textbooks and by teaching machine)
- \_\_\_ l. Other (specify) \_\_\_\_\_

## Category 5. BUDGET ALLOCATIONS

This category lists some of the areas for which school districts commonly budget funds. Select the one you think should receive the most emphasis for any additional financial resources which might become available and rank it as '1'. Continue to rank through five (5) choices.

## RANK

- ☐ a. Transportation
- ☐ b. Paraprofessional personnel (teacher aides)
- ☐ c. Specialized personnel (counselors, social workers, psychologists, etc.)
- ☐ d. Administrative and supervisory personnel
- ☐ e. Teaching personnel
- ☐ f. Classroom facilities and equipment
- ☐ g. Libraries and instructional center facilities and equipment
- ☐ h. Building maintenance and operation
- ☐ i. Textbooks and instructional supplies
- ☐ j. Audio-visual materials and equipment
- ☐ k. Other (specify) \_\_\_\_\_

## Category 6. ADMINISTRATIVE SERVICES

The following items represent services provided or coordinated by the administration of your school district. Rank the item which you feel most needs to be added or emphasized as '1'. Continue to rank through five (5) choices.

## RANK

- ☐ a. Community analysis (student population, district reorganization, etc.)
- ☐ b. Research (new programs, community educational needs, etc.)
- ☐ c. Staff personnel services (inservice-training)
- ☐ d. Pupil personnel services (attendance, grading, etc.)
- ☐ e. School-community relations (informing public of school programs and needs)
- ☐ f. School facility planning (building survey)
- ☐ g. Curriculum development
- ☐ h. Data processing (computer use)
- ☐ i. Business management
- ☐ j. Supervision of instruction
- ☐ k. Other (specify) \_\_\_\_\_

APPENDIX C  
STATEWIDE QUESTIONNAIRE



M. F. PETERSON  
SUPERINTENDENT

A. R. NESTOS  
DEPUTY

# THE STATE OF NORTH DAKOTA

## Department of Public Instruction

BISMARCK, NORTH DAKOTA 58501

RICHARD K. KLEIN  
ASSISTANT

H. J. SNORTLAND  
ASSISTANT

### ASSESSMENT OF EDUCATIONAL NEEDS FOR THE STATE OF NORTH DAKOTA

Dear Student:

As the heading of this letter indicates, the North Dakota Department of Public Instruction is attempting to identify areas of education which are in need of improvement within the State. You will greatly assist us with this task by taking the few minutes necessary to complete the attached questionnaire. Please read carefully the DIRECTIONS given on the back of this letter. Respond to the questions asked in terms of the whole State, not limiting your thinking to just the school which you attend. Also, do not limit your thinking to the financial resources available in your local region since the results of this study will likely influence the expenditure of certain State and Federal funds which are already committed to the improvement of education.

We would also like you to take home a similar questionnaire for your parents to fill out and return in the attached envelope. Before reading the DIRECTIONS, please detach the questionnaire and envelope for your parents and put it aside to take home. Thank you in advance for sharing your views on education with us.

Sincerely yours,

Vernon Eberly,  
State Coordinator, Title III ESEA

Please complete the following questions:

Your Name (optional) \_\_\_\_\_

Home Address (optional) \_\_\_\_\_

Sex: ☐ Male, ☐ Female

Where do you reside? ☐ Town, ☐ Country, but not on farm, ☐ Farm

Future plans? ☐ College, ☐ Service, ☐ Work, ☐ Vocational school,

☐ Farm, ☐ Other (describe) \_\_\_\_\_

What type of work does your father do? ☐ Farmer, ☐ Clerical (clerk, banker, etc.),

☐ Professional (teacher, doctor, etc.), ☐ Businessman,

☐ Laborer, ☐ Other (describe) \_\_\_\_\_



M. F. PETERSON  
SUPERINTENDENT

A. R. NESTOS  
DEPUTY

# THE STATE OF NORTH DAKOTA

## Department of Public Instruction

BISMARCK, NORTH DAKOTA 58501

RICHARD K. KLEIN  
ASSISTANT

H. J. SNORTLAND  
ASSISTANT

### ASSESSMENT OF EDUCATIONAL NEEDS IN THE STATE OF NORTH DAKOTA

Dear Parent:

As a parent who has children in school, you have several interests in the educational program of your local school district. Not only are you concerned about the quality of your son's or daughter's education, but, as a taxpayer, you are also concerned with the cost of providing this educational program. As the heading of this letter indicates, the North Dakota Department of Public Instruction is attempting to identify areas of education which are in need of improvement within the State. You will greatly assist us with this task by taking the ten to fifteen minutes necessary to complete the attached questionnaire. Please read carefully the DIRECTIONS given on the back of this letter. Respond to the questions asked in terms of the whole State, not limiting your thinking to just the school district within which your child(ren) attend school. Also, do not limit your thinking to the financial resources available in your local region since the results of this study will likely influence the expenditure of certain State and Federal funds which are already committed to the improvement of education.

Your response will be completely confidential. As you note, no names have been requested, and the self-addressed envelope to be used in returning the questionnaire has been pre-stamped and post-marked. Thank you in advance for sharing your views on education with us. Your local district will receive a summary of what all the students, parents and educators, not individuals, think are the areas most needing additional stress.

Sincerely,

*Vernon R. Eberly*  
Vernon Eberly,

State Coordinator, Title III, ESEA

Please complete the following question:

Sex of person completing this questionnaire male, female.

(Check male and female if both parents or guardians reacted to the questionnaire)



M. F. PETERSON  
SUPERINTENDENT

A. R. NESTOSS  
DEPUTY

# THE STATE OF NORTH DAKOTA

## Department of Public Instruction

BISMARCK, NORTH DAKOTA 58501

RICHARD K. KLEIN  
ASSISTANT

H. J. SNORTLAND  
ASSISTANT

### ASSESSMENT OF EDUCATIONAL NEEDS FOR THE STATE OF NORTH DAKOTA

Dear Educator:

As the heading of this letter indicates, the North Dakota Department of Public Instruction is attempting to identify areas of education which are in need of improvement within the State. Because of your position as an educator, you have a personal knowledge of the areas of education which need additional emphasis. While some of your district's students and their parents have also been asked to respond, your comments as professionals are most urgently required. You will greatly assist us with the task of identifying educational needs by taking the ten to fifteen minutes necessary to complete the attached questionnaire. Please read carefully the DIRECTIONS given on the back of this letter. Respond to the questions asked in terms of the whole State, not limiting your thinking to just the school where you work. Also, do not limit your thinking to the financial resources available in your local region since the results of this study will likely influence the expenditure of certain State and Federal funds which are already committed to improving education.

Please use the attached envelope to return the completed answer sheet for the questionnaire. Your name has not been requested so that confidentiality of your responses will be maintained. Thank you in advance for sharing your views on education with us.

Sincerely yours,

*Vernon Eberly*  
Vernon Eberly,

State Coordinator, Title III ESEA

Please complete the following questions:

What position(s) do you hold: ☐ Teacher, ☐ Counselor, ☐ Librarian,  
☐ Administrator, ☐ Other (describe) \_\_\_\_\_

Sex: ☐ Male, ☐ Female

Degree: ☐ Less than Bachelor's, ☐ Bachelor's, ☐ Master's or equivalent,  
☐ 15 semester hours or more beyond the Master's

Years of educational experience: ☐ 1, ☐ 2-4, ☐ 5-9, ☐ 10-19, ☐ 20-29, ☐ 30+

Grades taught (circle them): k 1 2 3 4 5 6 7 8 9 10 11 12

Subject area(s) if you teach other than general elementary \_\_\_\_\_



M F PETERSON  
SUPERINTENDENT

A R NESTOSS  
DEPUTY

# THE STATE OF NORTH DAKOTA

# Department of Public Instruction

BISMARCK. NORTH DAKOTA 58501

RICHARD K KLEIN  
ASSISTANT

H J SNORTLAND  
ASSISTANT

# ASSESSMENT OF EDUCATIONAL NEEDS IN THE STATE OF NORTH DAKOTA

Dear Fellow North Dakotan:

As a resident or former resident of North Dakota and a responsible citizen of the United States you have concern for our educational system. Possibly you will be, are, or have been a parent concerned for your son's or daughter's education. As a taxpayer you are also concerned with the cost of providing for this educational system. As the heading of this letter indicates, the North Dakota Department of Public Instruction is attempting to identify areas of education which are in need of improvement within the State. You will greatly assist us with this task by taking the few minutes necessary to complete the attached questionnaire. Please read carefully the DIRECTIONS given on the back of this letter. Respond to the questions asked in terms of the whole State, not limiting your thinking to just the school which you attend. Also, do not limit your thinking to the financial resources available in your local region since the results of this study will likely influence the expenditure of certain State and Federal funds which are already committed to the improvement of education.

Your responses will be completely confidential. As you note, no names have been requested, and the self-addressed envelope to be used in returning the questionnaire has been pre-stamped and post-marked. Thank you in advance for sharing your views on education with us.

Sincerely yours,

*Vernon R. Eberly*  
Vernon Eberly,  
North Dakota State Title III, ESEA

Please complete the following questions:

Sex: Male, Female

Circle the highest grade you have completed 1 2 3 4 5 6 7 8 9 10 11 12  
Fr. Sp. Jr. Sr. Masters Post-Masters

What type of work do you do? Farmer, Clerical (clerk, secretary, etc.)  
Professional (teacher, doctor, etc.) Businessman (banker, storeowner, etc.)  
 Laborer. Other (describe)



## C.5

## DIRECTIONS

This questionnaire contains a number of categories concerning education, for example, Category A, MAJOR ASPECTS OF A QUALITY EDUCATIONAL PROGRAM (see below). Under each category heading there will be found a list of ten (10) responses. For each category please RANK what you consider to be the FIVE (5) RESPONSES most needing additional emphasis within your school district or the region wherein you live. The following example will further explain how to rank the responses:

## Category A MAJOR ASPECTS OF A QUALITY

- \_\_\_ 1. Academic subject fields taught in
- \_\_\_ 2. Levels of education (pre-school,
- \_\_\_ 3. Counseling and psychological serv

## DIRECTIONS

1. SELECT THE RESPONSE UNDER EACH CATEGORY WHICH YOU BELIEVE NEEDS THE GREATEST ADDITIONAL EMPHASIS AND NOTE THE NUMBER PRINTED IN FRONT OF IT.
2. FOR EXAMPLE, IF YOU FEEL COUNSELING AND PSYCHOLOGICAL SERVICES NEEDS THE MOST EMPHASIS OF ALL THE TEN RESPONSES WITHIN CATEGORY A, NOTE THAT IT IS GIVEN THE NUMBER 3. THEN TURN TO THE ATTACHED Answer Sheet.
3. FIND THE SECTION TITLED CATEGORY A.
4. LOCATE THE COLUMN HEADED CHOICE.
5. CLEARLY MARK WITH A PENCIL THE ANSWER SPACE IDENTIFIED AS 3 IN THE ROW UNDER 1ST CHOICE.

## ANSWER SHEET

	CHOICE					
CATEGORY	1st					
A	2nd	1	2	3	4	5

The item which you believe needs emphasis, but not as much as your first choice (for example, Academic subject fields) would be ranked second (2nd). For the above example the answer space for response 1, Academic subject fields, is marked under 2nd Choice. Continue to rank in this manner what you consider to be the five (5) responses most needing additional emphasis.

(IF AFTER STUDYING THIS EXAMPLE YOU STILL FEEL UNCERTAIN ABOUT HOW TO USE THE ANSWER SHEET, THEN WRITE INSTEAD THE NUMBER YOU RANK AN ITEM IN FRONT OF THE ITEM. FOR THE EXAMPLE YOU WOULD WRITE A 1 IN FRONT OF COUNSELING AND PSYCHOLOGICAL SERVICES AND A 2 IN FRONT OF ACADEMIC SUBJECT FIELDS).

## Category A. MAJOR ASPECTS OF A QUALITY EDUCATIONAL PROGRAM

The following items are all components of a well-rounded educational program. Some of these components will exist in your school district; others might exist only in the surrounding region. After giving careful consideration to each component choose the one which you feel most needs to be added or improved and rank it '1'. (See EXAMPLE above.) Continue to rank until you have selected your first five (5) choices of items needing addition or improvement.

## RANK

- \_\_\_ 1. Academic subject fields taught in school (math, science, English)
- \_\_\_ 2. Level of education (pre-school, elementary, secondary, adult)
- \_\_\_ 3. Counseling and psychological services
- \_\_\_ 4. Educational programs for students with particular needs  
(slow learner, gifted, handicapped, etc.)
- \_\_\_ 5. On-the-job training for teachers covering various topic areas
- \_\_\_ 6. Vocational-technical programs (auto mechanics, agriculture, business)
- \_\_\_ 7. School services for pupils (health, speech therapist, reading specialist)
- \_\_\_ 8. Instructional approaches used by teachers with students  
(television, team teaching, audio-visual, etc.)
- \_\_\_ 9. More money for the various aspects of education  
(personnel, facilities, supplies, etc.)
- \_\_\_ 10. Administrative services and teacher personnel  
(school-community relations, financial management, problems occurring with obtaining and retaining teachers, etc.)

## C.6

### DIRECTIONS

This questionnaire contains a number of categories concerning education, for example, Category A, MAJOR ASPECTS OF A QUALITY EDUCATIONAL PROGRAM (see below). Under each category heading there will be found a list of ten (10) responses. For each category please RANK what you consider to be the FIVE (5) RESPONSES most needing additional emphasis within your school district or the region wherein you live. The following example will further explain how to rank the responses:

#### Category A MAJOR ASPECTS OF A QUALITY

#### DIRECTIONS

- \_\_\_1. Academic subject fields taught in
- \_\_\_2. Levels of education (pre-school,
- \_\_\_3. Counseling and psychological serv

- 1. SELECT THE RESPONSE UNDER EACH CATEGORY WHICH YOU BELIEVE NEEDS THE GREATEST ADDITIONAL EMPHASIS AND WRITE A ONE (1) IN FRONT OF IT.
- 2. FOR EXAMPLE, IF YOU THINK COUNSELING AND PSYCHOLOGICAL SERVICES NEEDS THE MOST EMPHASIS OF ALL THE TEN RESPONSES WITHIN CATEGORY A, WRITE A ONE (1) IN THE SPACE PROVIDED TO THE LEFT OF THE RESPONSE AS SHOWN. THIS ONE (1) INDICATES COUNSELING AND PSYCHOLOGICAL SERVICES IS YOUR FIRST CHOICE FOR THE RESPONSE WITHIN CATEGORY A WHICH MOST NEEDS EMPHASIS.

The response which you believe needs emphasis, but not as much as your first choice (for example, Academic subject fields) would be ranked second. For the example a two (2) has been written in front of Academic subject fields.

Continue to rank in this manner what you consider to be the five (5) responses most needing additional emphasis.

#### Category A. MAJOR ASPECTS OF A QUALITY EDUCATIONAL PROGRAM

The following items are all components of a well-rounded educational program. Some of these components will exist in your school district; others might exist only in the surrounding region. After giving careful consideration to each component choose the one which you feel most needs to be added or improved and rank it '1'. (See EXAMPLE above.) Continue to rank until you have selected your first five (5) choices of items needing addition or improvement.

#### RANK

- \_\_\_1. Academic subject fields taught in school (math, science, English)
- \_\_\_2. Level of education (pre-school, elementary, secondary, adult)
- \_\_\_3. Counseling and psychological services
- \_\_\_4. Educational programs for students with particular needs  
(slow learner, gifted, handicapped, etc.)
- \_\_\_5. On-the-job training for teachers covering various topic areas
- \_\_\_6. Vocational-technical programs (auto mechanics, agriculture, business)
- \_\_\_7. School services for pupils (health, speech therapist, reading specialist)
- \_\_\_8. Instructional approaches used by teachers with students  
(television, team teaching, audio-visual, etc.)
- \_\_\_9. More money for the various aspects of education  
(personnel, facilities, supplies, etc.)
- \_\_\_10. Administrative services and teacher personnel  
(school-community relations, financial management, problems occurring with obtaining and retaining teachers, etc.)

## Category B. VOCATIONAL-TECHNICAL PROGRAMS

This category lists possible programs of vocational or technical education that might be needed in the immediate region of where you live. Choose the vocational or technical program which you feel most needs emphasis in your region and rank it as '1'. Continue to rank until you have ranked your first five (5) choices.

## RANK

- \_\_\_ 1. Business (stenography, accounting, etc.)
- \_\_\_ 2. Skilled trades (carpenter, plumber, electrician, etc.)
- \_\_\_ 3. Applied arts (interior design, ceramics, etc.)
- \_\_\_ 4. Industrial (machine shop, welding, etc.)
- \_\_\_ 5. Human services (nurse, barber, beautician, etc.)
- \_\_\_ 6. Auto shop (motor repair, body work, etc.)
- \_\_\_ 7. Electronics (TV, radio, computer, appliance and small motor repair)
- \_\_\_ 8. Agricultural (farming, farm equipment, feed and seed, etc.)
- \_\_\_ 9. Home economics (food service, clothing, etc.)
- \_\_\_ 10. Other (specify) \_\_\_\_\_

## Category C. SCHOOL SERVICES FOR PUPILS

This category lists titles of specially trained persons who may be needed to provide services to students in your school district or region. Again, rank your first five (5) choices with '1' indicating the service which you feel needs the greatest additional emphasis.

## RANK

- \_\_\_ 1. School health nurse
- \_\_\_ 2. Social worker
- \_\_\_ 3. Reading specialist
- \_\_\_ 4. Post-graduation employment specialist
- \_\_\_ 5. Academic placement specialist (college or vocational school)
- \_\_\_ 6. Speech therapist
- \_\_\_ 7. Special education teacher (including learning disabilities)
- \_\_\_ 8. School psychologist
- \_\_\_ 9. Librarian and/or audio-visual specialist
- \_\_\_ 10. Other (specify) \_\_\_\_\_

## Category D. INSTRUCTIONAL APPROACHES

The following items represent some instructional approaches which are commonly used throughout the United States. Identify those your school should add or emphasis to a greater extent. Please rank your first five (5) choices.

RANK

- \_\_\_ 1. Instruction for students home bound by illness
- \_\_\_ 2. Team teaching
- \_\_\_ 3. Resource persons for use in the classroom
- \_\_\_ 4. Televised educational programs to your home
- \_\_\_ 5. Individualized instructional programs (tutoring and small group instruction)
- \_\_\_ 6. Flexibility in instruction (varying time periods for different classes, grouping children by age, not by grade levels, etc.)
- \_\_\_ 7. Audio-visual instruction
- \_\_\_ 8. Programmed textbooks, teaching machines and/or computer assisted instruction
- \_\_\_ 9. Closed circuit TV in school
- \_\_\_ 10. Other (specify)\_\_\_

## Category E. BUDGET ALLOCATIONS

This category lists some of the areas for which school districts commonly budget funds. Select the one you think should receive the most emphasis for any additional financial resources which might become available and rank it as '1'. Continue to rank through your first five (5) choices.

RANK

- \_\_\_ 1. County or regional programs of shared services too costly for individual schools (psychologists, social workers, computer, etc.)
- \_\_\_ 2. More paraprofessional personnel (teacher aides)
- \_\_\_ 3. More specialized personnel (counselors, social workers, psychologists, etc.)
- \_\_\_ 4. More administrative and supervisory personnel
- \_\_\_ 5. Teaching personnel (more teachers and/or increased salaries)
- \_\_\_ 6. Better classroom facilities and equipment
- \_\_\_ 7. Better libraries and instructional center facilities and equipment
- \_\_\_ 8. Additional textbooks and instructional supplies
- \_\_\_ 9. Additional audio-visual materials and equipment
- \_\_\_ 10. Other (specify)

## Category F. ADMINISTRATIVE SERVICES AND TEACHER PERSONNEL

The following items represent services provided or coordinated by the administration of your school district including problems of obtaining and retaining teachers. Rank the item which you feel most needs to be added or emphasized as '1'. Continue to rank through five (5) choices.

## RANK

- \_\_\_ 1. Research (school facility planning, building survey, community educational needs, district reorganization)
- \_\_\_ 2. School-community relations (informing public of school programs and needs)
- \_\_\_ 3. Data processing for school management (computer and other mechanical means of pupil record keeping, financial, accounting, etc.)
- \_\_\_ 4. Regional educational centers to provide educational services unavailable in smaller schools.
- \_\_\_ 5. Better methods of supervising teachers and evaluating their effectiveness (as an aid in teacher selection, etc.)
- \_\_\_ 6. Better system of incentives for teacher retention (salary schedules, insurance, etc.)
- \_\_\_ 7. Increased numbers of teacher applicants (number available, quality of their training during college and on-the-job)
- \_\_\_ 8. Teacher involvement in decision making concerning teacher-school negotiations
- \_\_\_ 9. Teacher utilization and specialization (teaching of only one subject, obtaining further training as librarian, counselor, etc.)
- \_\_\_ 10. Other (specify) \_\_\_\_\_

Recently there has been considerable discussion about the quality of our educational system. The following questions are designed to give educators a better idea what local citizens think about their schools and the financing needed to maintain them. Please check your response to each question in the space provided.

In your opinion, how do you think the schools in your community

1. compare with those in neighboring communities? . . . . .
2. compare with those in the larger cities, that is, Bismarck or Fargo? . . . . .
3. compare with schools in other parts of the United States? . . . . .

In regard to financing your local schools, how do you think your district

4. compares on spending for education to neighboring districts? . . . . .
5. compares with districts in larger cities, that is Bismarck or Fargo? . . . . .
6. compares to districts in other parts of the United States? . . . . .

	MUCH BETTER	BETTER	ABOUT THE SAME	POORER	MUCH POORER
1. compare with those in neighboring communities? . . . . .	-	-	-	-	-
2. compare with those in the larger cities, that is, Bismarck or Fargo? . . . . .	-	-	-	-	-
3. compare with schools in other parts of the United States? . . . . .	-	-	-	-	-
4. compares on spending for education to neighboring districts? . . . . .	-	-	-	-	-
5. compares with districts in larger cities, that is Bismarck or Fargo? . . . . .	-	-	-	-	-
6. compares to districts in other parts of the United States? . . . . .	-	-	-	-	-

## Category B. SUBJECT FIELDS

This category lists academic subject fields that may be taught in your school. Choose the subject field which you feel most needs additional emphasis and rank it as '1'. Continue to rank until you have ranked your first five (5) choices.

RANK

- \_\_\_ 1. Science (biology, chemistry, etc.)
- \_\_\_ 2. Social studies (history, geography, etc.)
- \_\_\_ 3. Mathematics
- \_\_\_ 4. Practical arts (home economics, bookkeeping, agriculture, etc.)
- \_\_\_ 5. Health and physical education
- \_\_\_ 6. Fine arts (music, drama, art, etc.)
- \_\_\_ 7. Language arts (English, literature, speech, etc.)
- \_\_\_ 8. Foreign languages
- \_\_\_ 9. Secondary school vocational-technical programs
- \_\_\_ 10. Other (specify)

## Category C. LEVELS OF EDUCATION

This category contains levels of education that may be needed in your school district or in the immediate region of where you live. Again rank your first five (5) choices with '1' indicating the level needing the greatest additional emphasis.

RANK

- \_\_\_ 1. Infant education (1-2 year olds)
- \_\_\_ 2. Early childhood (3-4 year olds)
- \_\_\_ 3. Kindergarten education (5 year olds)
- \_\_\_ 4. Elementary education (grades 1-8)
- \_\_\_ 5. Secondary education (grades 9-12)
- \_\_\_ 6. Post-secondary vocational-technical education
- \_\_\_ 7. Junior college
- \_\_\_ 8. College-university education
- \_\_\_ 9. Adult education
- \_\_\_ 10. Other (specify)

## Category D. COUNSELING AND PSYCHOLOGICAL SERVICES

The following items are services that may be needed by students in your school district. They are concerned with helping students to understand themselves and their surroundings, both as social beings and as productive members of society. Even if you feel your school cannot provide a service directly rank the item anyway because there might be other less expensive ways of providing the service. Please rank your first five (5) choices.

## RANK

- \_\_\_ 1. Pre-school guidance service
- \_\_\_ 2. Elementary (grades K-6) school guidance service
- \_\_\_ 3. Junior high (grades 7-9) school guidance service
- \_\_\_ 4. Educational-vocational guidance
- \_\_\_ 5. Personal counseling
- \_\_\_ 6. Group counseling
- \_\_\_ 7. Psychological testing
- \_\_\_ 8. Advisory services to teacher for student problems
- \_\_\_ 9. External sources of referral for children with problems (non-school)
- \_\_\_ 10. Other (specify) \_\_\_\_\_

## Category E. EDUCATIONAL PROGRAMS

This category contains educational programs designed to serve students with particular abilities or problems. Choose the one you believe to be most in need of additional emphasis or improvement in your school district or in the immediate region of where you live and rank it as '1'. Continue to rank through your first five (5) choices.

## RANK

- \_\_\_ 1. Program for mentally handicapped (trainable, educatable, etc. but not likely capable of attending high school)
- \_\_\_ 2. Program for slow learners (those capable of attending high school)
- \_\_\_ 3. Program for average pupils
- \_\_\_ 4. Program for academically talented
- \_\_\_ 5. Program for alienated youth (potential dropouts, unmotivated, etc.)
- \_\_\_ 6. Program for students terminating education with high school
- \_\_\_ 7. Program for culturally distinct (migratory, Indian, etc.)
- \_\_\_ 8. Program for physically handicapped (visual, orthopedic, etc.)
- \_\_\_ 9. Program for emotionally disturbed
- \_\_\_ 10. Other (specify) \_\_\_\_\_

## Category F. ON-THE-JOB TRAINING FOR TEACHERS

The following items represent aspects of education for which teachers may desire or need additional on-the-job training. Rank the item which you feel is most needed as '1'. Continue to rank through your first five (5) choices.

## RANK

- \_\_\_ 1. Instruction in using team teaching
- \_\_\_ 2. Instruction in selection and use of audio-visual materials and equipment
- \_\_\_ 3. Instruction in curriculum development
- \_\_\_ 4. Instruction in understanding and using educational research and evaluation of standardized tests
- \_\_\_ 5. Instruction in subject matter area taught by teacher
- \_\_\_ 6. Instruction in developing pupil motivation
- \_\_\_ 7. Instruction in pupil guidance
- \_\_\_ 8. Instruction in teaching students with learning disabilities
- \_\_\_ 9. Instruction in individualizing the learning process
- \_\_\_ 10. Other (specify) \_\_\_\_\_

Recently there has been considerable discussion about the quality of our educational system. The following questions are designed to give educators a better idea what local citizens think about their schools and the financing needed to maintain them. Please check your response to each question in the space provided.

In your opinion, how do you think the schools in your community

1. compare with those in neighboring communities? . . . . .
2. compare with those in the larger cities, that is, Bismarck or Fargo?.
3. compare with schools in other parts of the United States? . . . . .

In regard to financing your local schools, how do you think your district

4. compares on spending for education to neighboring districts? . . . . .
5. compares with districts in larger cities, that is Bismarck or Fargo?.
6. compares to districts in other parts of the United States? . . . . .

	MUCH BETTER	BETTER	ABOUT THE SAME	POOREP	MUCH POOREP
1. compare with those in neighboring communities? . . . . .	—	—	—	—	—
2. compare with those in the larger cities, that is, Bismarck or Fargo?.	—	—	—	—	—
3. compare with schools in other parts of the United States? . . . . .	—	—	—	—	—
4. compares on spending for education to neighboring districts? . . . . .	—	—	—	—	—
5. compares with districts in larger cities, that is Bismarck or Fargo?.	—	—	—	—	—
6. compares to districts in other parts of the United States? . . . . .	—	—	—	—	—



C.13

7. About how much more per year would you be personally willing to spend to support your community's school(s)?  
☐ NO MORE, ☐ LESS THAN 5 DOLLARS, ☐ \$5 TO \$10, ☐ \$10 TO \$15, ☐ MORE THAN \$15
8. Many people say that attending college is necessary for one to make an adequate living today. From your experience would you:  
☐ STRONGLY AGREE, ☐ AGREE, ☐ DO NOT KNOW, ☐ DISAGREE, ☐ STRONGLY DISAGREE
9. However, others argue that college isn't essential; that if one has a trade (carpenter, mechanic, TV repairman, etc.) he can make just as good a living. From your experience would you:  
☐ STRONGLY AGREE, ☐ AGREE, ☐ DO NOT KNOW, ☐ DISAGREE, ☐ STRONGLY DISAGREE
10. When you have a chance to vote on a school bond issue, how often do you actually go to the polls and cast a vote?  
☐ ALWAYS, ☐ 75% TO 100% OF THE TIME, ☐ 50% TO 75%, ☐ 25 TO 50%, ☐ LESS THAN 25% OF THE TIME
11. In general terms, when you go to the polls for a school bond issue, are you generally:  
☐ IN FAVOR OF THE ISSUE, ☐ OPPOSED TO THE ISSUE
12. Again in general terms, how well do you think the schools of your community are meeting the community's educational needs?  
☐ VERY WELL, ☐ REASONABLY WELL, ☐ ABOUT RIGHT, ☐ NOT VERY WELL, ☐ NOT AT ALL
13. Which of the following types of taxes would you favor as a means of providing for needed educational expenditures? (Check as many responses as apply)  
☐ NONE, ☐ ANY OF THESE, ☐ STATE INCOME TAX, ☐ SALES TAX, ☐ REAL ESTATE TAX
14. Would you favor more Federal aid as a means of providing for educational expenditures?  
☐ YES, ☐ NO

The following questions are optional

How many years of formal education have you completed?

☐ GRADE SCHOOL, ☐ HIGH SCHOOL, ☐ SOME COLLEGE, ☐ COLLEGE DEGREE,

Which of the following income groups best describes your annual income before taxes?

☐ LESS THAN \$3000, ☐ \$3000 TO \$6000, ☐ \$6000 TO \$10000, ☐ MORE THAN \$10000

THANK YOU VERY MUCH FOR YOUR ASSISTANCE

# ANSWER SHEET

## NORTH DAKOTA STATEWIDE EDUCATIONAL NEEDS ASSESSMENT

### DIRECTIONS

1. READ CAREFULLY the DIRECTIONS for how to use this Answer Sheet given on the second page of the questionnaire.
2. RANK FIVE (5) choices for each category corresponding to the five (5) answer spaces given to the right of each category letter below.
3. RETURN BOTH the QUESTIONNAIRE and the ANSWER SHEET when completed.

F	0	1	2	3	4	F	5	6	7	8	9
O	0	1	2	3	4	O	5	6	7	8	9
R	0	1	2	3	4	R	5	6	7	8	9
O	0	1	2	3	4	O	5	6	7	8	9
F	0	1	2	3	4	F	5	6	7	8	9
I	0	1	2	3	4	I	5	6	7	8	9
C	0	1	2	3	4	C	5	6	7	8	9
E	0	1	2	3	4	E	5	6	7	8	9
U	0	1	2	3	4	U	5	6	7	8	9
S	0	1	2	3	4	S	5	6	7	8	9
E	0	1	2	3	4	E	5	6	7	8	9
O	0	1	2	3	4	O	5	6	7	8	9
N	0	1	2	3	4	N	5	6	7	8	9
L	0	1	2	3	4	L	5	6	7	8	9
Y	0	1	2	3	4	Y	5	6	7	8	9

		CHOICE									
CATEGORY A	1st	1	2	3	4	5	6	7	8	9	10
	2nd										
	3rd										
	4th	1	2	3	4	5	6	7	8	9	10
	5th										
CATEGORY B	1st	1	2	3	4	5	6	7	8	9	10
	2nd										
	3rd	1	2	3	4	5	6	7	8	9	10
	4th										
	5th	1	2	3	4	5	6	7	8	9	10
CATEGORY C	1st	1	2	3	4	5	6	7	8	9	10
	2nd										
	3rd	1	2	3	4	5	6	7	8	9	10
	4th										
	5th	1	2	3	4	5	6	7	8	9	10
CATEGORY D	1st	1	2	3	4	5	6	7	8	9	10
	2nd										
	3rd	1	2	3	4	5	6	7	8	9	10
	4th										
	5th	1	2	3	4	5	6	7	8	9	10
CATEGORY E	1st	1	2	3	4	5	6	7	8	9	10
	2nd										
	3rd	1	2	3	4	5	6	7	8	9	10
	4th										
	5th	1	2	3	4	5	6	7	8	9	10

C.15  
DIRECTIONS

Enclosed you will find the following instruments identified by a colored sheet:

1. Pink - Teacher forms
2. Yellow - Eighth Grade Student forms
3. Green - Twelfth Grade Student forms
4. Blue - School Board Member forms

Teacher Forms (Pink) Note that each teacher's name is at the top of the cover letter. Please distribute them to the teachers, preferably in a teachers' meeting. This is recommended to insure a good response since it is recognized that teachers are busy and this is an imposition for them. During this meeting questions which might cause a teacher to set this questionnaire aside can be answered. The questionnaire will take approximately 30 minutes to complete. After completing the instrument, the teachers should use the envelope attached to the questionnaire for returning their copy. This is to insure teachers of the confidentiality of their responses. (The teachers may remove the name sticker if they wish.)

Eighth Grade (Yellow) and Twelfth Grade (Green) Forms) Please distribute these forms to the persons responsible for administering them such as the principals or the 8th and 12th grade teachers. Have them distribute the forms to the students in class or in a meeting. DO NOT distribute them to the students to complete on their own or very few will likely be returned. A common subject taken by all students, such as English or social studies, might be the best place to administer these forms.

Be sure that the students read the directions carefully. Also that they detach the parent form and take it home. When the students complete their forms, they should be returned to the person administering the forms, who will in turn return them to the University of North Dakota using the enclosed mailing envelope.

School Board Member Forms (Blue) Please distribute a copy of each form in a school board meeting, or by mail. Ask that they be completed, preferably immediately, and returned in the attached stamped envelope.

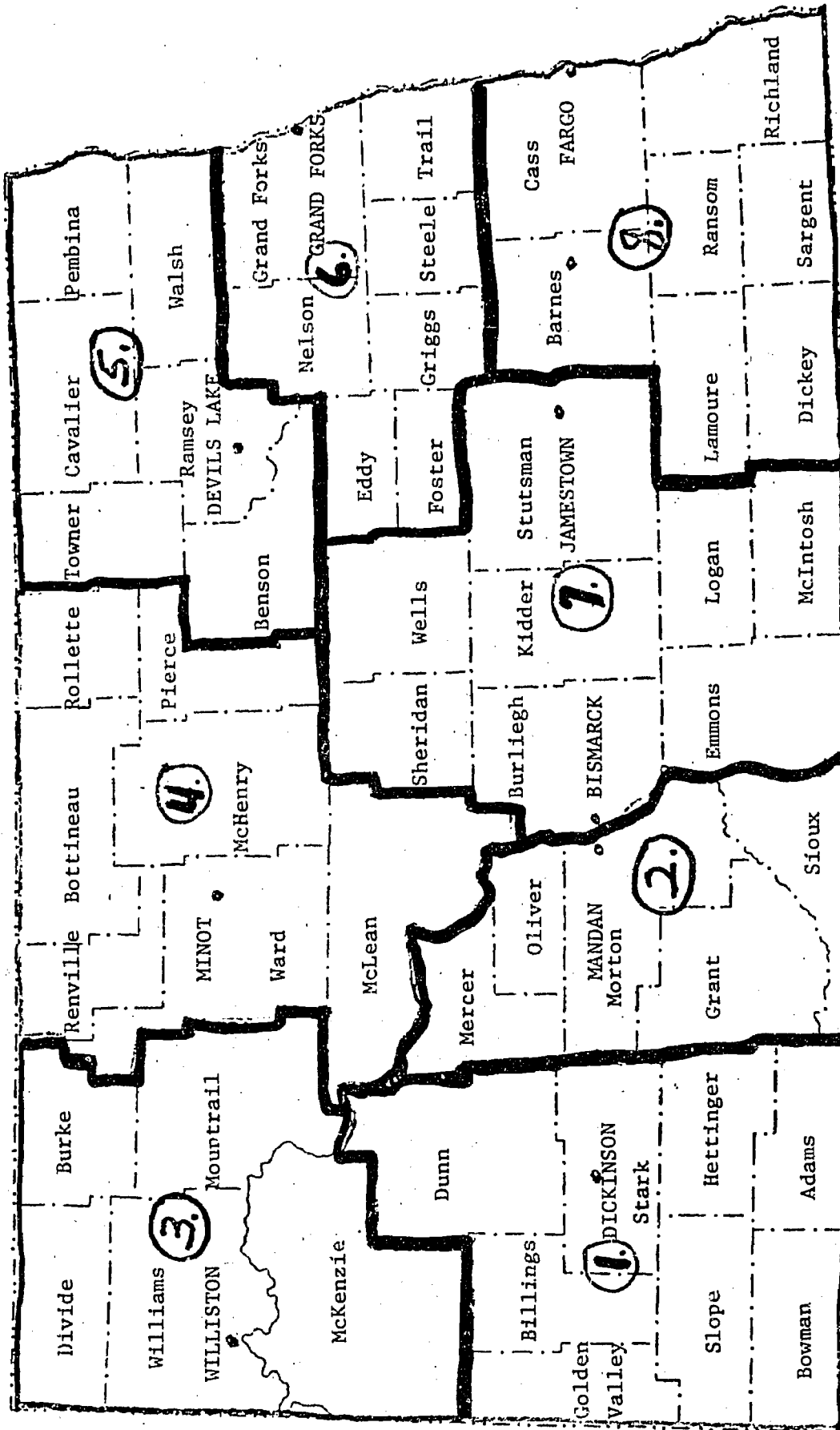
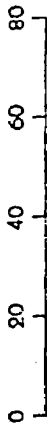
If you have any questions, call collect 777-2511 in Grand Forks.

APPENDIX D

REGIONAL MAP OF NORTH DAKOTA  
FROM 1970 TITLE III STATE PLAN

# NORTH DAKOTA

SCALE OF MILES



Eight Regions for Sampling Purposes  
for Assessment of Educational Needs

APPENDIX E

INSTRUCTIONS FOR REPORT ON CRITICAL NATURE  
OF EDUCATIONAL NEEDS

E.1

Instructions for Report on Critical Nature of Educational Needs

For each of the educational needs statements you have agreed to work with, please do the following:

1. Attempt to identify what thought or thoughts might have prompted respondents to rate this statement so high. In other words, what does this statement bring to mind as a problem or as problems requiring increased emphasis within the state. List each of these thoughts or problems.
2. For each thought or problem a statement might reflect identify appropriate data which shows the status of the thought or problem in North Dakota. This data might come from the Department of Public Instruction or other state sources, or graduate student research, or it could be data presently unavailable which we will have to collect. (In the latter case some funds are available to cover collection expenses.)
3. Identify national norms for each thought or problem and, whenever possible, the norms for neighboring states, i.e., Minnesota. Compare national or other state norms to the North Dakota data.
4. Make an interpretation of whether each thought or problem is: a) critical, where North Dakota is not as well off as the national or other state norms, b) not critical, where North Dakota is at least as well off as the norms, or, c) not interpretable, based on the available data. In the latter case suggest what should be done to remedy the situation so an interpretation can be made.

The report for each need statement should be more than two pages in length. Brief reports are extremely essential since over thirty of these reports will be included in a final document. But a thorough report is also absolutely essential since at least one other "expert" will be asked to react to each report and the U.S. Office of Education will also have a panel of "experts" react to the final document. One method of reducing the length of your reports might be to summarize the common elements of all the need statements before dealing with the specific aspects of each need statement. This method would be most useful for some groupings of needs such as those under counseling or special education.

One final point; please place emphasis on the need statements you have agreed to work with in the order in which they have been numbered and are listed below. The statement with the smallest number is of first importance.

CONSULTANT AGREEMENT

1. \_\_\_\_\_ agrees to prepare a report for each of the following category and needs statements. (The number in parentheses following each statement indicates the rank given the item by students.)  
\_\_\_\_\_  
\_\_\_\_\_

E.2

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2. A preliminary draft of the reports for each of the above statements is due by \_\_\_\_\_. The following fee has been agreed upon by both signing parties and will be paid upon receipt of the specified reports written according to the instructions given above. \_\_\_\_\_.
3. The above named consultant also agrees to finalize any of these reports at a date no later than December 1, 1969, upon negotiation of another consultant fee.

\_\_\_\_\_  
Consultant

\_\_\_\_\_  
Project Director